

**Coimisiún na Scrúduithe Stáit**  
**State Examinations Commission**

**Leaving Certificate 2025**

**Marking Scheme**

**Geography**

**Ordinary Level**

## **Note to teachers and students on the use of published marking schemes**

Marking schemes published by the State Examinations Commission are not intended to be standalone documents. They are an essential resource for examiners who receive training in the correct interpretation and application of the scheme. This training involves, among other things, marking samples of student work and discussing the marks awarded, so as to clarify the correct application of the scheme. The work of examiners is subsequently monitored by Advising Examiners to ensure consistent and accurate application of the marking scheme. This process is overseen by the Chief Examiner, usually assisted by a Chief Advising Examiner. The Chief Examiner is the final authority regarding whether or not the marking scheme has been correctly applied to any piece of candidate work.

Marking schemes are working documents. While a draft marking scheme is prepared in advance of the examination, the scheme is not finalised until examiners have applied it to candidates' work and the feedback from all examiners has been collated and considered in light of the full range of responses of candidates, the overall level of difficulty of the examination and the need to maintain consistency in standards from year to year. This published document contains the finalised scheme, as it was applied to all candidates' work.

In the case of marking schemes that include model solutions or answers, it should be noted that these are not intended to be exhaustive. Variations and alternatives may also be acceptable. Examiners must consider all answers on their merits, and will have consulted with their Advising Examiners when in doubt.

## **Future Marking Schemes**

Assumptions about future marking schemes on the basis of past schemes should be avoided. While the underlying assessment principles remain the same, the details of the marking of a particular type of question may change in the context of the contribution of that question to the overall examination in a given year. The Chief Examiner in any given year has the responsibility to determine how best to ensure the fair and accurate assessment of candidates' work and to ensure consistency in the standard of the assessment from year to year. Accordingly, aspects of the structure, detail and application of the marking scheme for a particular examination are subject to change from one year to the next without notice.

In considering this marking scheme, the following should be noted:

- The detail required in any answer is determined by the context and the manner in which the question is asked and by the number of marks assigned to the answer in the examination paper.
- Words, expressions or phrases must be correctly used in context and not contradicted, and where there is evidence of incorrect use or contradiction, the marks may not be awarded.
- As a general rule, if in doubt about the validity of any answer, examiners must consult their advising examiner before awarding marks.
- The suggestions, examples etc. in the scheme are not exhaustive and alternative valid answers etc. are acceptable.
- For the purpose of marking a Significant Relevant Point (SRP) is a single piece of factual information, to which an examiner will assign a mark weighting as prescribed in the marking scheme (typically 3 marks). As previously advised in Circular S85/09 and in the Sample Marking Indicators available on the SEC website each SRP should emerge from the information put forward by the candidate, leading to an overall coherent response to the question.

## Geographical Investigation- Core Unit 3

### 1. Introduction

4 SRP's @ 1m each

Conformity with prescribed length – 1m

Total marks 5

### 2. Planning

4 SRP's @ 1m each

Conformity with prescribed length – 1m

Total marks 5

### 3. Gathering of Data

Two Methods/Tasks @ 18m each

Each method/task – 9 SRP's @ 2m each

36m

Allow one SRP for diagram for each Method/Task.

|                               |
|-------------------------------|
| Coherence – 2m graded (2/1/0) |
|-------------------------------|

|                                      |
|--------------------------------------|
| Conformity with prescribed length 2m |
|--------------------------------------|

|    |
|----|
| 4m |
|----|

Total marks 40

### 4. Results, Conclusions, Evaluation

Three headings @ 8m each

Each heading: 4 SRP's @ 2m each

24m

|                               |
|-------------------------------|
| Coherence – 4m graded (4/2/0) |
|-------------------------------|

|                                      |
|--------------------------------------|
| Conformity with prescribed length 2m |
|--------------------------------------|

|    |
|----|
| 6m |
|----|

Total marks 30

### 5. Organisation and Presentation of Results

Two different methods of presentation.

Each presentation: 5 SRP's @ 2m each

Total marks 20

## Breakdown of Presentation Marks

### ***Pie Chart / Trend Graph / Bar Chart / Scatter Graph etc.***

|                           |                   |
|---------------------------|-------------------|
| X axis labelled / circle  | 2m                |
| Y axis labelled / centred | 2m                |
| Data presented correctly  | 2m                |
| Data presented correctly  | 2m                |
| Overall impression        | 2m graded (2/1/0) |

### ***Diagram / Sketch / Map***

|                                  |                     |
|----------------------------------|---------------------|
| 1 piece of annotated information | Shown 2m + Named 2m |
| 1 piece of annotated information | Shown 2m + Named 2m |
| Overall impression               | 2m graded (2/1/0)   |

### ***Table***

|                    |                   |
|--------------------|-------------------|
| Title              | 2m                |
| Rows labelled      | 2m                |
| Columns labelled   | 2m                |
| Data               | 2m                |
| Overall impression | 2m graded (2/1/0) |

**PART ONE – SHORT-ANSWER QUESTIONS – 100 MARKS**

ANY **TEN** QUESTIONS @ 10 MARKS EACH

Mark **all** questions attempted and award ten questions with highest marks.

|         |                        |    |           |
|---------|------------------------|----|-----------|
| Q.1     | B                      | 2m |           |
|         | E                      | 2m |           |
|         | A                      | 2m |           |
|         | D                      | 2m |           |
|         | C                      | 2m | Total 10m |
| Q.2 (i) | C                      | 2m |           |
|         | B                      | 2m |           |
|         | A                      | 2m |           |
| (ii)(a) | False                  | 2m |           |
| (ii)(b) | True                   | 2m | Total 10m |
| Q.3 (i) | C                      | 2m |           |
|         | A                      | 2m |           |
|         | B                      | 2m |           |
|         | D                      | 2m |           |
| (ii)    | Erosion                | 2m | Total 10m |
| Q.4 (i) | B                      | 2m |           |
|         | C                      | 2m |           |
| (ii)    | Sedimentary            | 2m |           |
|         | Metamorphic            | 2m |           |
|         | Igneous                | 2m | Total 10m |
| Q.5 (i) | North east             | 5m |           |
| (ii)    | 7 km <sup>2</sup>      | 5m | Total 10m |
| Q.6 (i) | 18hole golf            | 2m |           |
|         | Cycle route            | 2m |           |
|         | Cillin                 | 2m |           |
| (ii)    | National (secondary)   | 2m |           |
| (iii)   | Correctly drawn symbol | 2m | Total 10m |

|          |                     |    |           |
|----------|---------------------|----|-----------|
| Q.7 (i)  | False               | 2m |           |
| (ii)     | False               | 2m |           |
| (iii)    | True                | 2m |           |
| (iv)     | True                | 2m |           |
| (v)      | True                | 2m | Total 10m |
| Q.8      | B                   | 2m |           |
|          | E                   | 2m |           |
|          | A                   | 2m |           |
|          | D                   | 2m |           |
|          | C                   | 2m | Total 10m |
| Q.9 (i)  | 1973                | 2m |           |
| (ii)     | 3                   | 2m |           |
| (iii)    | Croatia             | 2m |           |
| (iv)     | 2004                | 2m |           |
| (v)      | Valid advantage     | 2m | Total 10m |
| Q.10 (i) | C                   | 2m |           |
|          | D                   | 2m |           |
|          | A                   | 2m |           |
|          | B                   | 2m |           |
| (ii)     | Anticyclone         | 2m | Total 10m |
| Q.11 (i) | 32 (%)              | 2m |           |
| (ii)     | Monaghan & Longford | 2m |           |
| (iii)    | Car                 | 2m |           |
| (iv)     | 2,320,297           | 2m |           |
| (v)      | Valid impact        | 2m | Total 10m |
| Q.12 (i) | D                   | 2m |           |
|          | A                   | 2m |           |
|          | C                   | 2m |           |
|          | B                   | 2m |           |
| (ii)     | Dormant             | 2m | Total 10m |

## **PART TWO – STRUCTURED QUESTIONS – 300 MARKS**

You must attempt **THREE** questions. You must answer one question from two different sections below:

- 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)

The third question can be from any section.

All questions carry equal marks.

***THESE QUESTIONS ARE TO BE ANSWERED IN THE ANSWERBOOK CONTAINING PART ONE***



## SECTION 1

### PATTERNS AND PROCESSES IN THE PHYSICAL ENVIRONMENT

#### Questions 1 to 3

All questions carry 100 marks.

#### Question 1

##### 1A. Ordnance Survey Map

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

Draw a sketch map of the area shown on the Ordnance Survey map.

On it, **show** and **label** each of the following:

- Lough Corrib
- The N59 road
- An area of coniferous plantation in the south east of the map
- The entire area of land above 200 metres at M 03 42
- Inishshanboe Island.

##### Sketch Outline:

|                         |                   |
|-------------------------|-------------------|
| Limits/Frame            | 1m                |
| Proportions (landscape) | 2m                |
| Overall Impression      | 2m graded (2/1/0) |
| Sub-total 5m            |                   |

##### Five items shown and labelled as follows:

|               |                   |
|---------------|-------------------|
| Showing       | 3m graded (3/1/0) |
| Labelled      | 2m                |
| Sub-total 25m |                   |

For an obvious tracing allow 50% of the marks obtained for showing and labelling items and 0m out of 5m for limits, proportion and overall impression.

**Total 30m**

**1B. Surface Processes**

**Answer (i) or (ii)**

- (i) Explain, with the aid of diagrams, the formation of any **two** landforms.

**Formation of any two landforms @ 20m each.**

**For each landform:**

|                                              |            |
|----------------------------------------------|------------|
| <b>Landform named</b>                        | <b>1m</b>  |
| <b>Diagram(s) two aspects @ 2m each</b>      | <b>4m</b>  |
| <b>Formation explained 5 SRP's @ 3m each</b> | <b>15m</b> |

**At least one SRP must explain a relevant process.**

**Allow one SRP for a named example.**

**Relevant information, additional to the text, given on diagrams can be awarded SRP's.**

**Total 40m**

**Or**

- (ii) Describe and explain any **two** processes of mass movement.

**Any two processes @ 20m each**

**For each process:**

|                                                    |            |
|----------------------------------------------------|------------|
| <b>Process stated</b>                              | <b>2m</b>  |
| <b>Description / Explanation 6 SRP's @ 3m each</b> | <b>18m</b> |

**At least one SRP for explanation.**

**Allow a named example for one SRP.**

**Allow one SRP for relevant annotated diagram.**

**Relevant information, additional to the text, given on diagrams can be awarded SRP's.**

**Total 40m**

**1C. Human Interaction with the Rock Cycle**

Describe and explain how humans interact with the rock cycle with reference to **one** of the following:

- Quarrying
- Mining
- Oil/Gas exploitation
- Geothermal energy production.

**Description / explanation 10 SRP's @ 3m each.**

**Allow one SRP for a named example.**

**At least one SRP for explanation.**

**Allow one SRP for relevant annotated diagram.**

**Relevant information, additional to the text, given on the diagrams can be awarded SRP's.**

**Positive and negative interpretation can be accepted.**

**Total 30m**

**Question 2**

**2A. Volcanoes**

## Volcanic Activity in Hawaii, USA



Hawaii is known worldwide as an active volcanic island, located in the Pacific Ocean.

Hawaii is located at a hotspot and experiences regular volcanic eruptions. The hotspot is responsible for these eruptions.

The Kilauea volcano, in the south east of the island, is one of the most active volcanoes in the world. It erupted three times in 2024.

Volcanoes are a huge tourism attraction for Hawaii and bring many tourists to the island every year. However, some tours were cancelled in 2024 as lava, toxic gasses and smoke erupted from Kilauea.

Amended from [www.nps.gov](http://www.nps.gov)

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

- (i) In which ocean is Hawaii located?

**Pacific**

**6m**

- (ii) What is responsible for the eruptions mentioned in the article?

**Hotspot**

**6m**

- (iii) How many times did Kilauea erupt in 2024?

**Three**

**6m**

- (iv) List **two** effects of a volcanic eruption.

**Valid effects listed**

**3m+3m**

- (v) Explain briefly **one** way to limit the damage caused by a volcanic eruption.

**Brief explanation two SRP's @ 3m each**

**6m**

**Total 30m**

## 2B. Rocks

- (i) Name **two** examples of sedimentary rocks.

**Sedimentary rocks named**

**3m+3m**

- (ii) State **two** uses of sedimentary rocks.

**Valid uses stated** **4m+3m**

(iii) Describe and explain how sedimentary rocks are formed.

**Description/Explanation 9 SRP's @ 3m each** **27m**

**At least one SRP for explanation.**

**Allow one SRP for relevant annotated diagram.**

**Relevant information, additional to the text, given on diagrams can be awarded SRP's.**

**Total 40m**

## **2C. Human Interaction with Surface Processes**

Examine how humans interact with **one** of the following surface processes:

- River processes
- Coastal processes
- Mass movement processes.

**Interaction identified** **3m**

**Explanation 9 SRP's @ 3m each** **27m**

**Allow a second interaction identified for one SRP.**

**All further interactions must be explained for SRP's.**

**Allow one SRP for a named example.**

**Allow one SRP for relevant annotated diagram.**

**Relevant information, additional to the text, given on the diagrams can be awarded SRP's.**

**Positive and negative interpretation can be accepted.**

**Total 30m**

## **Question 3**

### **3A. Surface Processes**



www.booking.com



www.worldofwaterfalls.com



www.britannica.com

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

- (i) In your answer book, match each of the photographs **A**, **B** and **C** with the landform that best matches it from the list below:

- **B** Waterfall 3m
- **C** Landslide 3m
- **A** Beach. 3m

- (ii) In your answer book, match each of the photographs **A**, **B** and **C** with the process most associated with its formation from the list below:

- **A** Coastal deposition 3m
- **B** River erosion 3m
- **C** Mass movement. 3m

- (iii) Name **one** process of river erosion.

**Valid process named** 6m

- (iv) Explain briefly the process of *longshore drift*.

**Brief explanation** **2 SRP's @ 3m each** **6m**

**Total 30m**

### 3B. Weathering

- (i) Name any **two** factors that influence weathering.

**Two valid factors named @ 2m each** **4m**

- (ii) Describe and explain any **two** of the following types of weathering:
- Freeze-thaw action
  - Carbonation
  - Onion weathering.

**Weathering type 1 explained 6 SRP's @ 3m each      18m**

**Weathering type 2 explained 6 SRP's @ 3m each      18m**

**Allow one SRP for relevant annotated diagram.**

**Relevant information, additional to the text, given on the diagrams can be awarded SRP's.**

**At least one SRP for explanation.**

**Total 40m**

### **3C. Plate Tectonics**

- (i) Name **two** examples of tectonic plates.

**Two valid tectonic plates named      3m+3m**

- (ii) Name **two** types of plate boundary.

**Two valid types of plate boundary named      3m+3m**

- (iii) Describe and explain what happens at plate boundaries.

**Description / explanation 6 SRP's @ 3m each.      18m**

**At least one SRP for explanation.**

**Allow a different named example for one SRP.**

**Allow one SRP for relevant annotated diagram.**

**Relevant information, additional to the text, given on diagrams can be awarded SRP's.**

**Total 30m**

## **SECTION 2**

### **REGIONAL GEOGRAPHY**

#### **Questions 4 to 6**

All questions carry 100 marks.

## Question 4

### 4A. European Region

Draw a sketch map of a **European** region (**not in Ireland**) that you have studied.

On it, **show** and **name** each of the following:

- **One** named river in this region
- **Two** named towns or cities in this region
- **One** named area of relief (upland or lowland) in this region.

| Outline of Region        | 6m graded (6/4/2/0) |                   |
|--------------------------|---------------------|-------------------|
| River:                   | Named               | 2m                |
|                          | Shown               | 4m graded (4/2/0) |
| Town/City 1:             | Named               | 2m                |
|                          | Shown               | 4m graded (4/2/0) |
| Town/City 2:             | Named               | 2m                |
|                          | Shown               | 4m graded (4/2/0) |
| Relief (upland/lowland): | Named               | 2m                |
|                          | Shown               | 4m graded (4/2/0) |
| Total 30m                |                     |                   |

### 4B. Secondary Economic Activity in an Irish Region

Answer each of the following questions with reference to an **Irish** region that you have studied.

- (i) Name **one** example of a secondary economic activity in this region.

**One valid secondary economic activity named** **4m**



- (ii) Explain the advantages that this region has for the development of this secondary economic activity.

**Explanation 9 SRP's @ 3m each**

**27m**

**Allow a named region for one SRP.**

- (iii) Describe **one** challenge faced by this secondary economic activity in this region.

**Description 3 SRP's @ 3m each**

**9m**

**Total 40m**

#### **4C. Regions and Culture**

The culture of a region can often be determined by the following factors:

|             |          |             |
|-------------|----------|-------------|
| Religion    | Language | Politics    |
| Music/Dance |          | Sport/Games |

Describe and explain the importance of culture in any **one** region that you have studied.

**Description/explanation 10 SRP's @ 3m each**

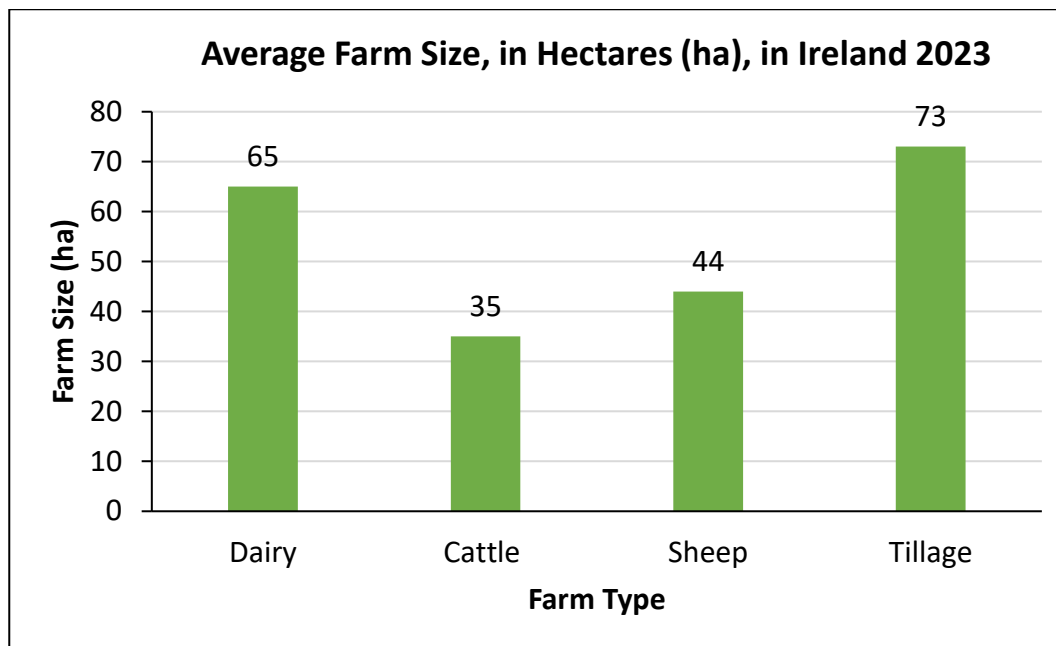
**Allow a cultural region named for one SRP**

**At least one SRP for explanation.**

**Total 30m**

## Question 5

### 5A. Agriculture in Ireland



Amended from [www.teagasc.ie](http://www.teagasc.ie)

Examine the chart above showing the average size of Irish farms in hectares (ha) in 2023 and answer each of the following questions.

- (i) Which farm type had the smallest average farm size?

**Cattle** **6m**

- (ii) What was the average size (in hectares) of tillage farms?

**73 (ha)** **6m**

- (iii) Calculate the difference (in hectares) between the average dairy farm size and the average sheep farm size.

**21 (ha)** **6m**

- (iv) State **two** products made from the output of a dairy farm.

**Two valid products stated** **3m+3m**

- (v) Briefly explain the importance of farming to the Irish economy.

**Brief explanation** **2 SRP's @ 3m each** **6m**

**Total 30m**

### 5B. Economic Activities – European Region

Explain the development of any **two** of the following with reference to a **European** region (**not in Ireland**) that you have studied:

- The reasons why **tourists** are attracted to the region
- The importance of **manufacturing** to the region
- The development of **transport** in the region.

**Activity 1 explained 7 SRP's @ 3m each** **21m**

**Activity 2 explained 6 SRP's @ 3m each** **18m**

**Region named** **1m**

**Total 40m**

#### **5C. Regional Problems**

Describe and explain **two** problems faced by any region that you have studied.

##### **Problem 1**

**Description/Explanation 5 SRP's @ 3m each** **15m**

##### **Problem 2**

**Description/Explanation 5 SRP's @ 3m each** **15m**

**At least one SRP for explanation for each problem.**

**Allow a named region for one SRP.**

**Total 30m**

### **Question 6**

#### **6A. Employment in Europe**

Percentage (%) of working population in selected EU countries, 2023

| Country     | Total Working Population (%) | Male Working Population (%) | Female Working Population (%) |
|-------------|------------------------------|-----------------------------|-------------------------------|
| Netherlands | 83                           | 87                          | 80                            |
| Ireland     | 79                           | 84                          | 74                            |
| Finland     | 78                           | 78                          | 78                            |
| Italy       | 66                           | 76                          | 57                            |

Amended from www.europa.eu

Examine the table above with information on the percentage (%) of working population in employment in selected European Union countries in 2023 and answer each of the following questions.

- (i) What percentage (%) of Ireland's male working population were in employment?  
**84 (%)** **6m**
- (ii) In which country were 78% of the female working population in employment?  
**Finland** **6m**
- (iii) Calculate the difference between the percentage (%) of the male working population in employment and the percentage (%) of the female working population in employment in Italy.  
**19 (%)** **6m**
- (iv) State **two** benefits to a country of a high percentage of its working population being in employment.  
**Two valid benefits stated** **3m+3m**
- (v) Explain briefly **one** reason why the percentage of males in employment is often higher than the percentage of females in employment  
**Brief explanation** **2 SRP's @ 3m each** **6m**

**Total 30m**

#### 6B. Primary Economic Activity in a Continental / Sub-Continental Region

Answer each of the following questions with reference to a **Continental / Sub-Continental** region (**not in Europe**) that you have studied.

- (i) Name **one** primary economic activity that contributes to the economy of this region.

**One valid primary economic activity named** **4m**

- (ii) Explain the advantages that this region has for the development of the primary economic activity named in part (i) above.

**Explanation 9 SRP's @ 3m each** **27m**

**Allow a named region for one SRP.**

- (iii) Describe **one** problem faced by this primary economic activity in this region.

**Description 3 SRP's @ 3m each** **9m**

**Total 40m**

**6C. Urban Regions**

Describe and explain the reasons for the growth of any **one** urban area that you have studied.

**Description/explanation 10 SRP's @ 3m each**

**At least one SRP for explanation.**

**Allow an urban area named for one SRP.**

**Total 30m**

## **SECTION 3**

### **ELECTIVES**

#### **Questions 7 to 12**

**Patterns and Processes in Economic Activities (Questions 7, 8 and 9)**

**Patterns and Processes in the Human Environment (Questions 10, 11 and 12)**

All questions carry 100 marks.

## PATTERNS AND PROCESSES IN ECONOMIC ACTIVITIES

### Questions 7 to 9

All questions carry 100 marks.

Draw a sketch map of the area shown on the aerial photograph.

On it, **show** and **label** each of the following:

- A lake in the background
- **Two** connecting streets in the left foreground
- A field used for agriculture in the right background
- An industrial building in the centre middleground
- A sports ground.

#### Sketch Outline:

|                                           |                   |
|-------------------------------------------|-------------------|
| Limits/frame                              | 1m                |
| Proportions (landscape)                   | 2m                |
| Overall impression                        | 2m graded (2/1/0) |
|                                           | Sub-total 5m      |
| Five items shown and labelled as follows: |                   |
| Showing                                   | 3m graded (3/1/0) |
| Labelled                                  | 2m                |
|                                           | Sub-total 25m     |

For an obvious tracing allow 50% of marks obtained for the features but 0 marks out of the 5 for sketch map.

**Total 30m**

### 7B. Economic Activity – Environmental Pollution

- (i) Name **one** example of environmental pollution caused by economic activity.

**Valid example named** **4m**

- (ii) Explain the causes **and** effects of this environmental pollution.

**Cause identified one SRP @ 3m each** **3m**

|                                                                   |     |
|-------------------------------------------------------------------|-----|
| Effect identified one SRP @ 3m each                               | 3m  |
| Explanation 6 SRP's @ 3m each                                     | 18m |
| (iii) Describe how this environmental pollution could be reduced. |     |
| Description 4 SRP's @ 3m each                                     | 12m |
| <b>Total 40m</b>                                                  |     |

**7C. Economic Development – Developed Economy**

Describe and explain the development of **one** of the following with reference to a developed economy that you have studied:

- Tourism
- Financial services
- Service and footloose industries.

|                                           |     |
|-------------------------------------------|-----|
| Named developed economy                   | 3m  |
| Description/explanation 9 SRP's @ 3m each | 27m |
| At least one SRP for explanation.         |     |
| <b>Total 30m</b>                          |     |

**Question 8**

**8A. Employment in Ireland**

Number of new jobs created by the Industrial Development Authority (IDA)  
in selected counties in 2018, 2020 and 2022

| County | 2018   | 2020   | 2022   |
|--------|--------|--------|--------|
| Cavan  | 16     | 30     | 39     |
| Dublin | 13,035 | 12,174 | 17,207 |



|           |       |     |       |
|-----------|-------|-----|-------|
| Limerick  | 1,491 | 787 | 1,125 |
| Roscommon | 126   | 120 | 126   |

Amended from www.oireachtas.ie

Examine the table above showing the number of new jobs created by the IDA in selected counties in 2018, 2020 and 2022 and answer each of the following questions.

- (i) How many new jobs were created in Limerick in 2020?  
**787** **6m**
- (ii) Which county had the lowest number of new jobs created in 2018?  
**Cavan** **6m**
- (iii) Which county had 126 new jobs created in 2022?  
**Roscommon** **6m**
- (iv) Calculate the difference between the number of new jobs created in Dublin in 2020 and 2022.  
**5,033** **6m**
- (v) Explain briefly why the number of new jobs created in Dublin and Limerick is much higher than the number of new jobs created in Cavan and Roscommon.  
**Brief explanation** **2 SRP's @ 3m each** **6m**

**Total 30m**

## 8B. Ordnance Survey Map

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

Imagine you have been given the task of finding a suitable location for a new factory within the area covered by the map.

- (i) State, using a six-figure grid reference, where you would locate the factory.  
**Six-figure grid reference** **4m graded (4/2/0)**
- (ii) Explain the reasons why you chose this location.  
**Reasons explained 9 SRP's @ 3m each** **27m**

- (iii) Describe **one** disadvantage of locating the factory at this location.

**One disadvantage described 3 SRP's @ 3m each** **9m**

**Total 40m**

#### **8C. Colonialism**

- (i) Name **one** developing economy which has been colonised **and** name the country that colonised it.

**Valid colonised country** **3m**

**Valid colonising country** **3m**

- (ii) Describe and explain the effects that colonialism has had on this developing economy.

**Description / Explanation 8 SRP's @ 3m each** **24m**

**At least one SRP for explanation.**

**Total 30m**

## Question 9

### 9A. Ireland's Economy

New Car Registrations in Ireland in 2023 by Engine Type

| Engine Type                  | Percentage (%) Market Share |
|------------------------------|-----------------------------|
| Petrol                       | 30                          |
| Diesel                       | 22                          |
| Petrol/Diesel Hybrid         | 21                          |
| Electric                     | 18                          |
| Petrol/Diesel Plug-in Hybrid | 9                           |

Amended from [www.simi.ie](http://www.simi.ie)

Examine the data above on new car registrations in Ireland in 2023 by engine type and answer each of the following questions.

- (i) Using graph paper, draw a suitable graph to illustrate this data.

|                                  |                   |
|----------------------------------|-------------------|
| Graph paper                      | 3m                |
| Vertical axis labelled/Circle    | 3m graded (3/1/0) |
| Horizontal axis labelled/Centred | 3m graded (3/1/0) |
| 5 items @ 3m each graded (3/1/0) | 15m               |
|                                  | Sub-total 24m     |

- (ii) In your answer book, explain briefly what is meant by the term *renewable energy*.

|                                     |    |
|-------------------------------------|----|
| Brief explanation 2 SRP's @ 3m each | 6m |
|-------------------------------------|----|

**Total 30m**

### 9B. Multinational Company

- (i) Name **one** multinational company that you have studied **and** state where this multinational company is located in Ireland.

**Valid MNC named** **2m**

**Valid location stated** **2m**

- (ii) Name **one** product manufactured by this multinational company **and** name **one** country (other than Ireland) where this product is sold.

**Valid product named** **3m**

**Valid country named** **3m**

- (iii) Explain the advantages of being located in Ireland for this multinational company.

**Explanation 7 SRP's @ 3m each** **21m**

- (iv) Explain **one** reason why this multinational company might decide to locate to another country.

**Explanation 3 SRP's @ 3m each** **9m**

**Total 40m**

#### **9C. Ireland and the European Union**

Explain how being a member of the European Union has impacted on the Irish economy.

**Impact Identified 1 SRP** **3m**

**Explanation 9 SRP's @ 3m each** **27m**

**Allow a second impact identified for one SRP.**

**Allow a named policy (or policy area) for one SRP.**

**Total 30m**

# **PATTERNS AND PROCESSES IN THE HUMAN ENVIRONMENT**

## **Questions 10 to 12**

All questions carry 100 marks.

### **Question 10**

#### **10A. Aerial Photograph**

Examine the aerial photograph of Oughterard accompanying this paper.

Draw a sketch map of the area shown on the aerial photograph.

On it, **show** and **label** each of the following:

- A car park
- The Central Business District (CBD)
- A church
- An area of semi-detached housing in the centre foreground
- An area of recreational activity.

#### **Sketch Outline:**

|                                |                          |
|--------------------------------|--------------------------|
| <b>Limits/frame</b>            | <b>1m</b>                |
| <b>Proportions (landscape)</b> | <b>2m</b>                |
| <b>Overall impression</b>      | <b>2m graded (2/1/0)</b> |
|                                | <b>Sub-total 5m</b>      |

#### **Five items shown and labelled as follows:**

|                 |                          |
|-----------------|--------------------------|
| <b>Showing</b>  | <b>3m graded (3/1/0)</b> |
| <b>Labelled</b> | <b>2m</b>                |
|                 | <b>Sub-total 25m</b>     |

**For an obvious tracing allow 50% of marks obtained for the features but 0 marks out of the 5 for sketch map.**

**Total 30m**

### 10B. Migration – Ireland

Migration takes place due to push factors and pull factors.

- (i) Name **one** push factor **and one** pull factor associated with migration.

**Push factor named** **2m**

**Pull factor named** **2m**

- (ii) Discuss the positive impacts of migration on Ireland.

**Discussion 6 SRP's @ 3m each** **18m**

- (iii) Discuss the negative impacts of migration on Ireland.

**Discussion 6 SRP's @ 3m each** **18m**

**Total 40m**

### 10C. Traffic Congestion

- (i) Name **one** example of an urban area where traffic congestion is a problem.

**Named example** **3m**

- (ii) Describe and explain the measures that can be taken in urban areas to solve the problem of traffic congestion.

**Description / Explanation 9 SRP's @ 3m each** **27m**

**At least one SRP for explanation.**

**Total 30m**

## Question 11

### 11A. Population Characteristics

Population figures for selected EU countries, 2022

| Country   | Total Population (millions) | Population Density (persons per km <sup>2</sup> ) | Birth Rate (per 1,000 of population) |
|-----------|-----------------------------|---------------------------------------------------|--------------------------------------|
| Ireland   | 5.2                         | 75                                                | 10.4                                 |
| Belgium   | 11.6                        | 384                                               | 9.8                                  |
| Lithuania | 2.8                         | 45                                                | 7.8                                  |
| Greece    | 10.5                        | 80                                                | 7.3                                  |

Amended from [www.europa.eu](http://www.europa.eu)

Examine the table above showing population figures for selected European Union countries in 2022 and answer each of the following questions.

- (i) What was the population (in millions) of Ireland?  
**5.2 (millions)** **6m**
- (ii) Which country had the highest population density?  
**Belgium** **6m**
- (iii) In which country was the birth rate 7.3?  
**Greece** **6m**
- (iv) Calculate the difference (in millions) between the total population of Lithuania and the total population of Greece.  
**7.7 (millions)** **6m**
- (v) Explain briefly **one** impact of high birth rates in Ireland.  
**Brief explanation 2 SRP's @ 3m each** **6m**

**Total 30m**

### 11B. Developing World City

- (i) Name **one** city in the developing world that is growing rapidly.  
**Developing City named** **4m**
- (ii) State **three** factors that influence the growth of this developing world city.  
**Factor 1:** **3m**  
**Factor 2:** **3m**  
**Factor 3:** **3m**
- (iii) Describe and explain any **three** problems associated with the rapid growth of this developing world city.  
**Description / Explanation 9 SRP's @ 3m each** **27m**  
**At least one SRP for explanation.**
- Total 40m**

### 11C. Population Dynamics

'Population change is influenced by many factors including income levels, culture and society and medical technology.'

Describe and explain the factors that influence population change.

**Factor named** **3m**

**Description/explanation 9 SRP's @ 3m each** **27m**

**At least one SRP for explanation.**

**Allow a second factor named for one SRP.**

**Total 30m**

## Question 12



## 12A. Urban Population

Percentage (%) of the Global Population  
Living in Urban Areas, 1982-2022

| Year | Percentage (%)<br>of Global Population |
|------|----------------------------------------|
| 1982 | 40                                     |
| 1992 | 44                                     |
| 2002 | 48                                     |
| 2012 | 53                                     |
| 2022 | 57                                     |

Amended from [www.worldbank.org](http://www.worldbank.org)

Examine the table above showing the percentage (%) of the global population living in urban areas between 1982 and 2022 and answer each of the following questions.

- (i) Using graph paper, draw a suitable graph to illustrate this data.

**Graph paper**

**3m**

**Vertical axis labelled/Circle**

**3m graded (3/1/0)**

**Horizontal axis labelled/Centred**

**3m graded (3/1/0)**

**5 items @ 3m each graded (3/1/0)**

**15m**

**Sub-total 24m**

- (ii) In your answer book, explain briefly **one** impact of an increasing percentage (%) of the global population living in urban areas.

**Brief explanation 2 SRP's @ 3m each**

**6m**

**Total 30m**

## 12B. Rural Settlement Patterns

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

- (i) Name **three different** rural settlement patterns evident on the map **and** give a six-figure grid reference for the location of an example of each.

|                          |                          |
|--------------------------|--------------------------|
| <b>Pattern 1 named:</b>  | <b>4m</b>                |
| <b>Pattern 2 named:</b>  | <b>3m</b>                |
| <b>Pattern 3 named:</b>  | <b>3m</b>                |
| <b>Grid reference 1:</b> | <b>4m graded (4/2/0)</b> |
| <b>Grid reference 2:</b> | <b>4m graded (4/2/0)</b> |
| <b>Grid reference 3:</b> | <b>4m graded (4/2/0)</b> |

- (ii) Describe and explain each of the **three** rural settlement patterns named by you in part (i) above.

**Description/explanation for each pattern:**

|                                     |           |
|-------------------------------------|-----------|
| <b>Pattern 1: 2 SRP's @ 3m each</b> | <b>6m</b> |
| <b>Pattern 2: 2 SRP's @ 3m each</b> | <b>6m</b> |
| <b>Pattern 3: 2 SRP's @ 3m each</b> | <b>6m</b> |

**Total 40m**

## 12C. Urban Land-Use

- (i) Name **one** urban area you have studied.

|                               |           |
|-------------------------------|-----------|
| <b>Valid urban area named</b> | <b>3m</b> |
|-------------------------------|-----------|

- (ii) Name **two** land-uses in this urban area.

|                              |              |
|------------------------------|--------------|
| <b>Valid land-uses named</b> | <b>3m+3m</b> |
|------------------------------|--------------|

- (iii) Describe and explain how these urban land-uses have changed over time.

|                                                  |            |
|--------------------------------------------------|------------|
| <b>Description/explanation 7 SRP's @ 3m each</b> | <b>21m</b> |
|--------------------------------------------------|------------|

**Total 30m**



