



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

**Leaving Certificate 2014**

**Marking Scheme**

**Geography**

**Higher 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.

## Introduction

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.
- Word, 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 2 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.

## PART ONE – SHORT-ANSWER QUESTIONS – 80 MARKS

Attempt **TEN** questions.

All questions carry equal marks.

***THESE QUESTIONS ARE TO BE ANSWERED IN THE SPACES PROVIDED***

Any 10 questions @ 8 marks each

Each question:

4 parts @ 2 marks each or 8 parts @ 1 mark each

Q4(iv), Q9(iv), Q11(iv) & Q12(iv) @ 1 + 1 mark

No grading

- Q.1 B Human  
A Natural  
D Human  
C Natural
- Q.2 D Glacial processes  
A Fluvial processes  
B Glacial processes  
C Fluvial processes
- Q.3 D Joint  
G Syncline  
A Volcano  
C Coastal deposits  
E Bedding plane  
H Magma chamber  
B Weathering  
F Anticline
- Q.4 (i) 6°C  
(ii) Award 2m (ambiguous wording)  
(iii) Isotherms  
(iv) Any valid explanation
- Q.5 (i) A North American  
B Eurasian  
C African  
D South American  
(ii) E Constructive/Diverging  
F Conservative /Neutral  
Passive / Transform, etc  
(iii) True  
True
- Q.6 Berlin Germany  
Mediterranean Southern Europe  
County Meath Ireland  
Basque Lands Northern Spain
- Q.7 (i) S 273 009  
(ii) 90 km<sup>2</sup>  
(iii) North, North East, NNE  
(iv) 6.8 (km)
- Q.8 (i) X 255 930  
(ii) N25  
(iii) Any valid statement  
(iv) Priory/Church
- Q.9 (i) Gran Canaria  
(ii) 2,000m  
(iii) 6,000m  
(iv) Any valid explanation
- Q.10 C Dendritic  
D Deranged  
B Trellis  
A Radial
- Q.11 (i) 7,700  
(ii) 10,500  
(iii) 40,800  
(iv) Any valid explanation
- Q.12 (i) 15.8 (%)  
(ii) 3.5 (%)  
(iii) 47.8 (%)  
(iv) Any valid explanation

## **PART TWO – STRUCTURED and ESSAY QUESTIONS – 320 MARKS**

You must attempt **FOUR** questions, as follows:

- **TWO** questions from **Section 1 – Core:**
  - **One** question from Questions 1, 2 and 3
- AND**
- **One** question from Questions 4, 5 and 6
- **ONE** question from **Section 2 – Electives**
- **ONE** question from **Section 3 – Options**

***THESE QUESTIONS ARE TO BE ANSWERED IN THE ANSWER BOOK***

### **SECTION 1 – CORE**

#### **Questions 1 to 6**

You **MUST** attempt **TWO** questions:

- **ONE** from **Patterns and Processes in the Physical Environment**
- AND**
- **ONE** from **Regional Geography**

## PATTERNS AND PROCESSES IN THE PHYSICAL ENVIRONMENT

### Questions 1 to 3

Attempt **ONE** question

#### Question 1

##### A. Ordnance Survey Map

Examine the 1:50000 Ordnance Survey map and legend that accompany this paper.  
Draw a sketch map of the area shown to half scale.  
On it, correctly show and label each of the following:

- The complete course of the Colligan River
- Locate a gorge on the Colligan River and mark it with an X on the sketch map
- The Cunnigar sand spit
- An area of land above 300 metres.

[20m]

Sketch Outline: 4 marks  
4 features @ 4 marks each: Shown 3 marks (graded 3/1/0)  
Named 1 mark

- If sketch is traced or only a section of the map is drawn, lose 4 marks for sketch outline and lose 3 marks for showing per item. Allow naming marks only.
- The sketch must have four sides drawn.

##### B. Rocks

Explain the formation of igneous rocks with reference to Irish examples.

[30m]

Two Irish igneous rocks named 2 + 2 marks  
Explanation of formation 13 x SRPs

- Credit relevant labelled diagram for 1 x SRP.
- Credit extra relevant information on labelled diagram for 2 x SRPs.
- Diagram without labelling 0 marks.
- Credit 3<sup>rd</sup> named igneous rock for 1 x SRP.
- Max 2 x SRPs if merely a description of igneous rocks with no reference to formation.

### C. Human Interaction with Surface Processes

Human activity impacts on surface processes.

Examine this statement with reference to **one** of the following:

- The impact of dams on river processes
- The impact of coastal defence work on coastal processes
- The impact of human activity on mass movement.

[30m]

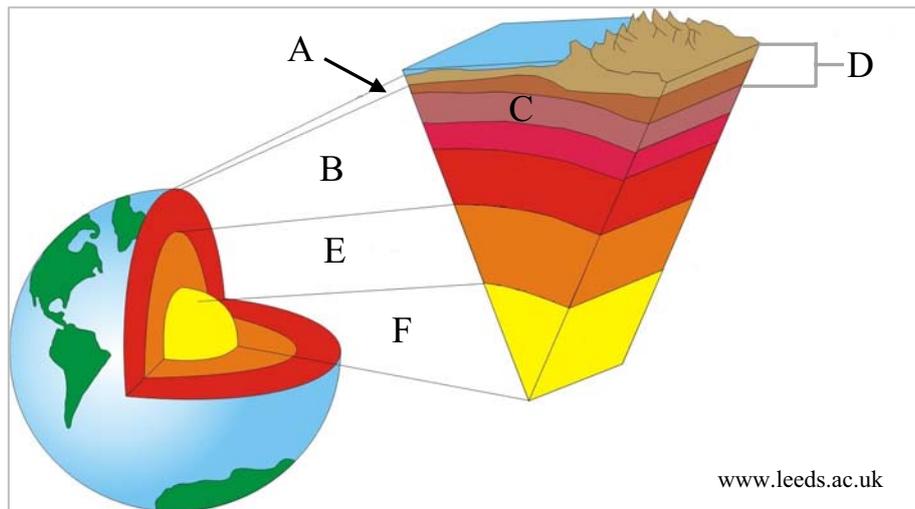
Impact on process identified                      2 marks

Examination of impact on process              14 x SRPs

- Credit 2<sup>nd</sup> impact on process identified for 1 x SRP.
- Question not tied to Ireland.
- Credit two named examples for 2 x SRPs from examination.
- Credit 1 x SRP for relevant labelled diagram.
- Credit extra relevant information on labelled diagram for 2 x SRPs.
- Diagram without labelling 0 marks.
- Discussion may be positive or negative.
- Max 2 x SRPs if merely a description of human activities with no reference to impact on surface processes.

## Question 2

### A. Internal Structure of the Earth



Examine the diagram above showing the internal structure of the earth and answer each of the following questions.

- (i) Name each of the layers of the earth **A**, **B**, **C**, **D**, **E** and **F**.
- (ii) Describe briefly the main difference between the composition of layer **C** and layer **D**.
- (iii) Explain briefly why plates move.

[20m]

- |       |                       |               |             |
|-------|-----------------------|---------------|-------------|
| (i)   | <b>A</b>              | Crust         | 2 marks     |
|       | <b>B</b>              | Mantle        | 2 marks     |
|       | <b>C</b>              | Asthenosphere | 2 marks     |
|       | <b>D</b>              | Lithosphere   | 2 marks     |
|       | <b>E</b>              | Outer core    | 2 marks     |
|       | <b>F</b>              | Inner core    | 2 marks     |
| (ii)  | Any valid description |               | 2 + 2 marks |
| (iii) | Any valid explanation |               | 2 + 2 marks |

## B. Landform Development

Answer (i) or (ii).

[30m]

- (i) Explain the formation of **one** landform of erosion **and one** landform of deposition that you have studied.

Landform of erosion named	2 marks
Landform of deposition named	2 marks
Formation landform of erosion	6/7 x SRPs
Formation landform of deposition	6/7 x SRPs

- For each landform credit relevant labelled diagram for 1 x SRP.
- Diagram without labelling 0 marks.
- For each landform credit extra relevant information on labelled diagram for 1 x SRP.
- Credit a max of 1 x SRP per landform if merely a description of each landform with no reference to formation.
- Credit 2 x SRP for examples, one example of each landform.
- Credit 1 x SRP per landform for explanation of a named process. All further discussion of processes must be tied to formation of the landform.

Or

- (ii) Describe and explain **two** processes of mass movement that you have studied.

Two processes named	2 + 2 marks
Examination of process 1	6/7 x SRPs
Examination of process 2	6/7 x SRPs

- For each process credit relevant labelled diagram for 1 x SRP.
- Diagram without labelling 0 marks.
- For each process credit extra relevant information on labelled diagram for 1 x SRP.
- Max 3/4 x SRPs if merely a description of mass movement processes with no reference to explanation.
- Credit 2 x SRP for examples, one example of each process.

### C. Rocks and Landscapes

Examine how different rock types produce distinctive landscapes, with reference to examples that you have studied.

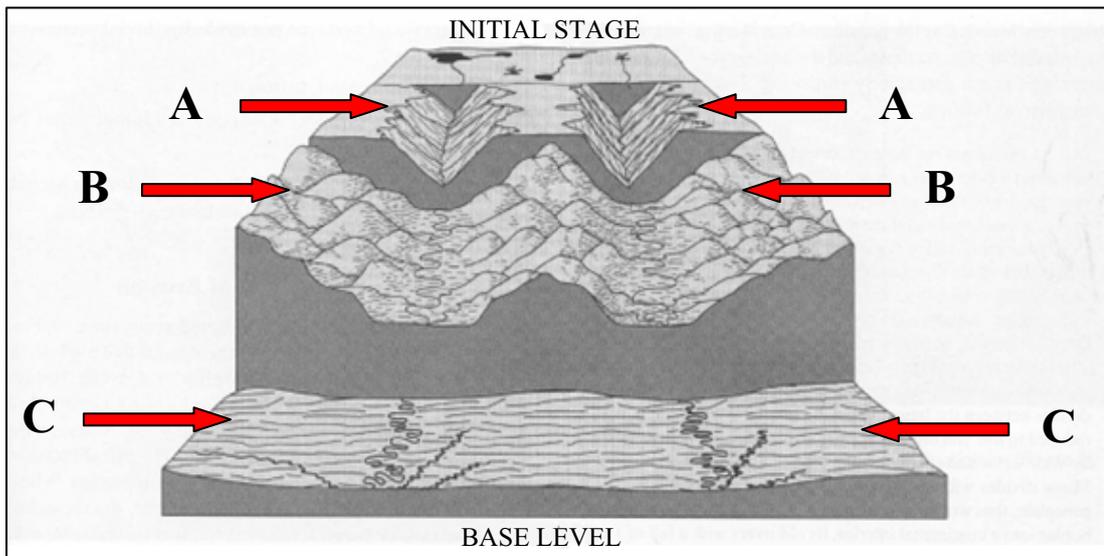
[30m]

Rock 1 and assoc. landscape named	2 + 2 marks
Rock 2 and assoc. landscape named	2 + 2 marks
Examination	11 x SRPs

- Question not tied to Ireland.
- Credit 1 x SRP for relevant labelled diagram.
- Credit extra relevant information on labelled diagram for 2 x SRPs.
- Diagram without labelling 0 marks.
- Description of either the rock or the landscape with no reference to the relationship between rock and landscape max 2 x SRPs.
- If only one rock and landscape examined max of 6 x SRPs.

### Question 3

#### A. Landscape Development



Amended from [www.clasfaculty.ucdenver.edu](http://www.clasfaculty.ucdenver.edu)

Examine the diagram above which shows the stages in the cyclical development of a fluvial landscape and answer each of the following questions.

- (i) Name each of the stages **A**, **B** and **C**.
- (ii) Name **one** fluvial landform from each of the stages **A**, **B** and **C**.
- (iii) Explain briefly what is meant by peneplain.
- (iv) Explain briefly what is meant by base level.

[20m]

- |       |          |                          |             |
|-------|----------|--------------------------|-------------|
| (i)   | <b>A</b> | Youthful / Young / Upper | 2 marks     |
|       | <b>B</b> | Mature / Middle          | 2 marks     |
|       | <b>C</b> | Senile / Old age / Lower | 2 marks     |
| (ii)  | <b>A</b> | Valid fluvial landform   | 2 marks     |
|       | <b>B</b> | Valid fluvial landform   | 2 marks     |
|       | <b>C</b> | Valid fluvial landform   | 2 marks     |
| (iii) |          | Any valid explanation    | 2 + 2 marks |
| (iv)  |          | Any valid explanation    | 2 + 2 marks |

## **B. Plate Tectonics**

Describe and explain destructive plate boundaries.

**[30m]**

Examination

15 x SRPs

- Credit relevant labelled diagram for 1 x SRP.
- Credit extra relevant information on labelled diagram for 2 x SRPs.
- Diagram without labelling 0 marks.
- Credit 3 x SRPs for examples.
- Max 8 x SRPs if merely a description of plate boundaries with no reference to explanation.

## **C. Sedimentary Structures**

Examine how sedimentary structures, such as bedding planes and joints, influence the development of landforms.

**[30m]**

Examination

15 x SRPs

- Credit relevant labelled diagram for 1 x SRP.
- Credit extra relevant information on labelled diagram for 2 x SRPs.
- Diagram without labelling 0 marks.
- Credit 3 x SRPs for examples from examination.
- Max 2 x SRPs if no link between the influence of sedimentary structures on the development of landforms.

## REGIONAL GEOGRAPHY

### Questions 4 to 6

Attempt **ONE** question

#### Question 4

##### A. Map Skills

Draw an outline map of **Ireland**.

On it, show and name different examples of each of the following:

- The outline of a named geomorphological region
- A named urban centre in a peripheral region
- The outline of a named cultural region
- The outline of a named core region.

[20m]

Map outline

4 marks graded (4/2/0)

4 features @ 4 marks each:

Shown 2 marks graded (2/1/0)

Named 2 marks

- Do not accept European or Continental / Sub Continental region.
- Accept any valid type of urban centre irrespective of size.

##### B. European Union

Examine how enlargement of the European Union impacts on existing member states.

[30m]

Impact identified

2 marks

Examination

14 x SRPs

- Max 2 x SRPs if merely a description of enlargement of the EU and impacts on existing member states not examined.
- Allow 2<sup>nd</sup> impact identified for 1 x SRP.
- Impacts may be positive or negative, social or economic.
- Question not tied to Ireland.

### C. Population Dynamics

Account for the growth **and** distribution of population in a **Continental / Sub-Continental** region (not in Europe) that you have studied.

[30m]

Examination

15 x SRPs

- Do not accept Irish or European region.
- Examination without reference to named or clearly inferred region 0 marks.
- Max 2 x SRPs if merely a description of population, population growth and distribution with no explanation.
- Must be reference to both population growth and distribution. Max 8 x SRPs if only examination of population growth or population distribution.

## Question 5

### A. Irish Trade

Irish External Trade, 1996 to 2012

Year	Exports €million	Imports €million	Trade Surplus €million
1996	38,609	28,480	10,129
2000	83,889	55,909	27,980
2004	84,410	51,105	33,305
2008	86,394	57,585	28,809
2012	91,688	49,151	<b>X</b>

Amended from CSO

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

- (i) In which years did Ireland's imports exceed €55 billion?
- (ii) Calculate **X**, the value of Ireland's trade surplus in 2012.
- (iii) What was the percentage increase in Ireland's trade surplus between 2000 and 2004?
- (iv) Explain briefly **one** advantage of having a trade surplus.
- (v) Name **two** Irish agricultural exports.

[20m]

Five parts @ 4 marks each

- |       |                       |             |
|-------|-----------------------|-------------|
| (i)   | 2000 and 2008         | 2 + 2 marks |
| (ii)  | €42,537 million       | 4 marks     |
| (iii) | 19 or 19.03           | 4 marks     |
| (iv)  | Any valid explanation | 2 + 2 marks |
| (v)   | Any two exports       | 2 + 2 marks |

## B. European Regions

Examine the importance of relief to the economic development of any **two** contrasting **European** regions (not in Ireland) that you have studied.

[30m]

Examination of Region 1	7/8 x SRPs
Examination of Region 2	7/8 x SRPs

- Do not accept Irish or Continental / Sub - Continental regions.
- No reference to relief max 2 x SRPs per region.
- No reference to economic development max 2 x SRPs per region.
- If only one region discussed max 8 x SRPs.
- Allow 1 x SRP for example within each region. Accept specific examples of relief.

## C. Economic Activity

Discuss the factors that influence the development of secondary economic activity in a **Continental / Sub-Continental** region (not in Europe) that you have studied.

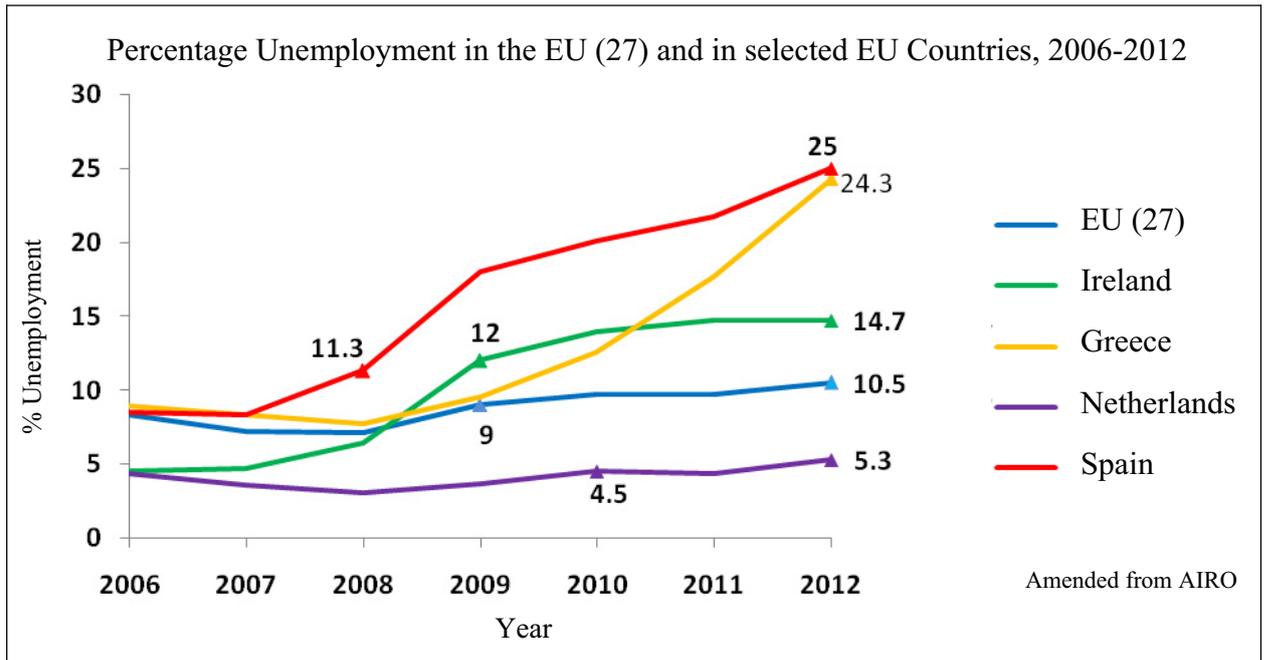
[30m]

Factors identified	2 + 2 marks
Discussion	13 x SRPs

- Do not accept Irish or European region.
- Allow 2 x SRPs for examples of different secondary economic activity.
- Discussion without link to a named or clearly inferred region 0 marks.
- Allow 3rd factor identified for 1 x SRP.
- Max 7 x SRPs if only one factor discussed.
- Max 2 x SRP for mere description of secondary economic activity with no reference to factors that influence its development.

## Question 6

### A. European Union Unemployment



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

- Which country had the highest percentage unemployment between 2008 and 2012 **and** which country had the lowest percentage unemployment between 2008 and 2012?
- Which country had the most significant increase in percentage unemployment between 2010 and 2012?
- Name **two** countries where the percentage unemployment decreased between 2006 and 2007.
- Calculate the increase in the percentage unemployment in the EU (27) between 2009 and 2012 **and** state **one** reason for this increase.
- Explain briefly **one** economic effect of increased unemployment.

[20m]

Five parts @ 4 marks each

- |       |                            |             |
|-------|----------------------------|-------------|
| (i)   | Spain and Netherlands      | 2 + 2 marks |
| (ii)  | Greece                     | 4 marks     |
| (iii) | Any 2 of Greece/Neth/Spain | 2 + 2 marks |
| (iv)  | 1.5 (%)                    | 2 marks     |
|       | Any valid reason stated    | 2 marks     |
| (v)   | Any valid explanation      | 2 + 2 marks |

## B. Socio-Economic Regions

Economic activity in core regions differ from those in peripheral regions.  
Examine this statement with reference to examples that you have studied.

[30m]

Core and Peripheral regions named      2 + 2 marks  
Examination                                      13 x SRPs

- Accept discussion of one or more economic activity.
- Accept all types of economic activity i.e. Primary, Secondary and Tertiary.
- Max 2 x SRPs for mere description of economic activity in either core or peripheral regions.
- Allow 2 x SRP for examples of economic activity.

## C. Agriculture in Ireland

Account for the development of agriculture in an **Irish** region that you have studied, with reference to any **two** of the following factors:

- Relief
- Climate
- Markets.

[30m]

Account of Factor 1                              7/8 x SRPs  
Account of Factor 2                              7/8 x SRPs

- Do not accept European or Continental / Sub Continental region.
- Discussion without link to a named or clearly inferred Irish region 0 marks.
- Max 2 x SRPs per factor if merely a description of each factor with no reference to the development of agriculture.
- Positive and negative interpretation of development is acceptable.
- Allow 2 x SRP for examples of types of agriculture.

**SECTION 2 – ELECTIVES**

**Questions 7 to 12**

You **MUST** attempt **ONE** question from:

**Patterns and Processes in Economic Activities**

**OR**

**Patterns and Processes in the Human Environment**

## PATTERNS AND PROCESSES IN ECONOMIC ACTIVITIES

### Questions 7 to 9

#### Question 7

##### A. Economic Development

The Human Development Index (HDI) Data for Selected Countries, 2012

HDI Rank	Country	HDI 2012	Life expectancy at birth (years)	Gross National Income Per Capita(\$)
1	Norway	0.955	81.3	\$48,688
3	USA	0.937	78.7	\$43,480
26	UK	0.875	80.3	\$32,538
85	Brazil	0.730	73.8	\$10,152
101	China	0.699	73.7	\$7,945
136	India	0.554	65.8	\$3,285
146	Pakistan	0.515	65.7	\$2,566
175	Afghanistan	0.374	49.1	\$1,000

www.undp.org

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

- (i) Calculate the difference in Gross National Income between the USA and China.
- (ii) Name the country with the lowest life expectancy at birth **and** name the country with the highest life expectancy at birth.
- (iii) Explain briefly **one** reason why life expectancy at birth is higher in some countries.
- (iv) Life expectancy and income levels are two factors used to calculate the Human Development Index. Name a third factor.
- (v) Explain briefly **one** use of the Human Development Index.

[20m]

Five parts @ 4 marks each

- (i) \$35,535 4 marks
- (ii) Afghanistan and Norway 2 + 2 marks
- (iii) Any valid explanation 2 + 2 marks
- (iv) Education, etc. 4 marks
- (v) Any valid explanation 2 + 2 marks

## B. Renewable Energy

Examine the economic and environmental advantages of using renewable energy sources.

[30m]

Economic advantage identified	2 marks
Environmental advantage identified	2 marks
Examination	13 x SRPs

- Max 7 x SRPs if only examination of economic or environmental advantages.

## C. Developed Economy

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

- Footloose industries
- Financial services
- Mass tourism.

[30m]

Developed economy named	2 marks
Examination	14 x SRPs

- Discussion without reference to named developed economy max 2 x SRPs.
- Max 2 x SRPs if merely a description of the activity with no reference to the development of the activity.
- Credit 1 x SRP for example of activity.

## Question 8

### A. Aerial Photograph

Examine the aerial photograph accompanying this paper.  
Draw a sketch map of the aerial photograph, half the length and half the breadth.  
On it, correctly show and label each of the following:

- A recreational area
- A large commercial/industrial building
- A bridge
- An area of waste ground suitable for development.

[20m]

Sketch Outline:	4 marks
4 features @ 4 marks each:	Shown 3 marks (graded 3/1/0)
	Named 1 mark

- If sketch is traced or a section of the aerial photograph is drawn lose 4 marks for sketch outline and lose 3 marks per item for showing. Allow naming marks only.
- The sketch must have four sides drawn.

### B. Multinational Company

With reference to **one** multinational company that you have studied, describe and explain any **two** of the following:

- Sourcing of raw materials and components
- Location of processing units
- Location of markets.

[30m]

MNC named	2 marks
Examination 1	7 x SRPs
Examination 2	7 x SRPs

- Discussion without link to named multinational company 0 marks.
- Max 4 x SRPs per factor if merely a description of factor with no reference to explanation.

### C. Ireland and the European Union

Examine the impact of European Union policy on the Irish economy.

[30m]

Impact identified	2 marks
Policy identified	2 marks
Examination	13 x SRPs

- Credit 2<sup>nd</sup> impact identified for 1 x SRPs from examination.
- Credit 2<sup>nd</sup> policy identified for 1 x SRPs from examination.
- All further impacts and policies require examination.
- Discussion without reference to Irish economy max 2 x SRPs.
- Discussion without reference to European Union policy max 2 x SRPs.
- Accept both positive and negative viewpoints within the discussion.



## B. Location of Economic Activity

Examine the 1:50000 Ordnance Survey map and legend that accompany this paper. Explain **three** reasons why a multinational company would be attracted to this area using evidence from the Ordnance Survey map to support each reason.

[30m]

Three reasons @ 10 marks each

For each reason:

Reason stated 2 marks

Map reference / evidence 2 marks

Examination 3 x SRPs

- Map evidence must be specific i.e. grid reference or named rivers, etc.
- Examination must be based on relevant explanation rather than on further reasons.
- If answer is based on aerial photograph allow marks for stating reason only.

## C. Conflict of Interest

Examine how conflict can arise between economic interests and environmental interests regarding the exploitation of resources, with reference to **two** examples that you have studied.

[30m]

Two examples 2 + 2 marks

Examination 13 x SRPs

- Max 7 x SRPs for discussion to one side of conflict only.
- Max 2 x SRPs if there is no reference to conflict.

## PATTERNS AND PROCESSES IN THE HUMAN ENVIRONMENT

### Questions 10 to 12

#### Question 10

##### A. Settlement Patterns

Examine the 1:50000 Ordnance Survey map and legend that accompany this paper.  
Draw a sketch map of the area shown to half scale.

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

- The built up area of Dungarvan
- An area of linear/ribbon rural settlement
- An area of dispersed rural settlement
- An area of clustered rural settlement.

[20m]

Sketch Outline:

4 marks

4 features @ 4 marks each

Shown 3 marks (graded 3/1/0)

Named 1 mark

- If sketch is traced or only a section of the map is drawn, lose 4 marks for sketch outline and lose 3 marks for showing per item. Allow naming marks only.
- The sketch must have four sides drawn.

## B. Changing Urban Functions

Examine how the functions of urban centres can change over time, with reference to Irish example(s).

[30m]

Functions identified	2 + 2 marks
Example Irish urban centre	2 marks
Examination	12 x SRPs

- Credit 2<sup>nd</sup> example of Irish urban centre for 1 x SRP from examination.
- An urban centre can be a city, a specific part of a named city or a town.
- Discussion without reference to named Irish urban centre max 2 x SRPs.
- Max 2 x SRPs for mere description of functions when there is no reference to change over time.

## C. Migration

With reference to a developed region that you have studied, explain the impact of rural to urban migration on donor and receiver regions.

[30m]

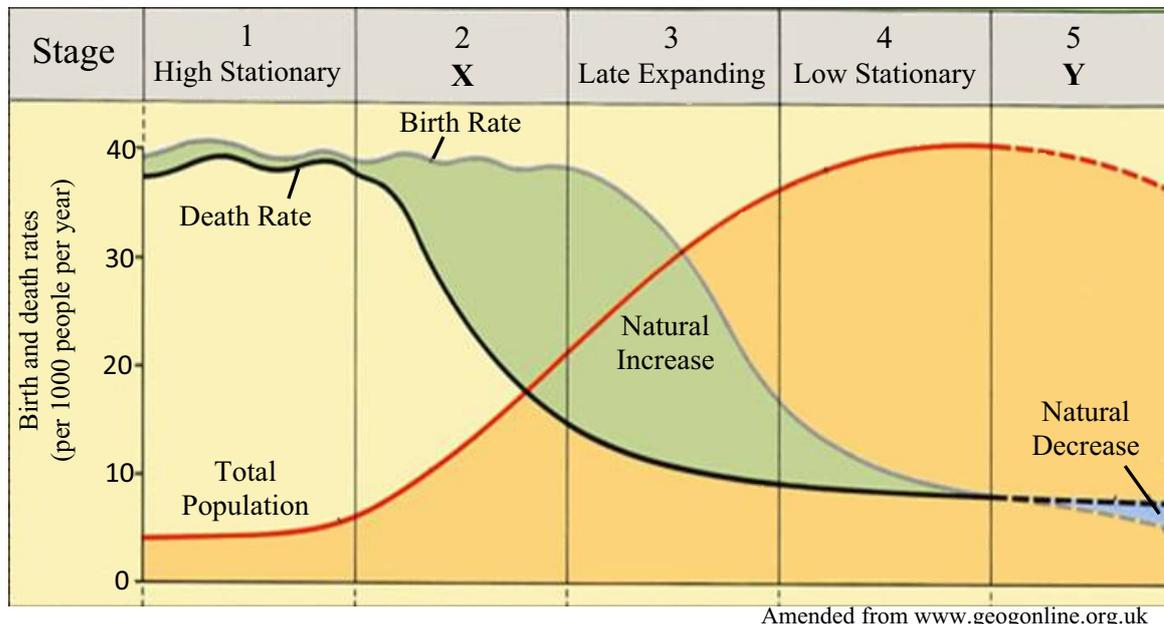
Named developed region	2 marks
Impact on donor region identified	2 marks
Impact on receiver region identified	2 marks
Examination	12 x SRPs

- All further impacts require examination.
- Discussion without reference to named developed region max 2 x SRPs.
- Discussion of impact on donor or receiver region only max 6 x SRPs.
- Max 2 x SRPs for mere description of rural-urban migration with no reference to donor and receiver region.
- Max 2 x SRPs for mere description of migration with no reference to rural-urban migration.

## Question 11

### A. Population Dynamics

The Demographic Transition Model



Examine the diagram above showing the Demographic Transition Model and answer each of the following questions.

- In which stage of the Demographic Transition Model is the total population at its lowest?
- Name **X**, Stage 2 of the Demographic Transition Model **and** name an example of a country in this stage.
- Name **Y**, Stage 5 of the Demographic Transition Model **and** name an example of a country in this stage.
- Explain briefly **one** problem facing countries in Stage 5 of the Demographic Transition Model.
- Explain briefly what is meant by natural increase.

[20m]

Five parts @ 4 marks each

- |       |                              |             |
|-------|------------------------------|-------------|
| (i)   | Stage 1 / High Stationary    | 4 marks     |
| (ii)  | Early Expanding              | 2 marks     |
|       | Any valid example            | 2 marks     |
| (iii) | Senile / declining / Old age | 2 marks     |
|       | Any valid example            | 2 marks     |
| (iv)  | Any valid explanation        | 2 + 2 marks |
| (v)   | Any valid explanation        | 2 + 2 marks |

## B. Population Distribution

Examine the 1:50 000 Ordnance Survey map and legend that accompany this paper. Explain **three** reasons why the area north of Northing 97 is less attractive to human settlement, using evidence from the Ordnance Survey map to support each reason.

[30m]

Three reasons @ 10 marks each

For each reason:

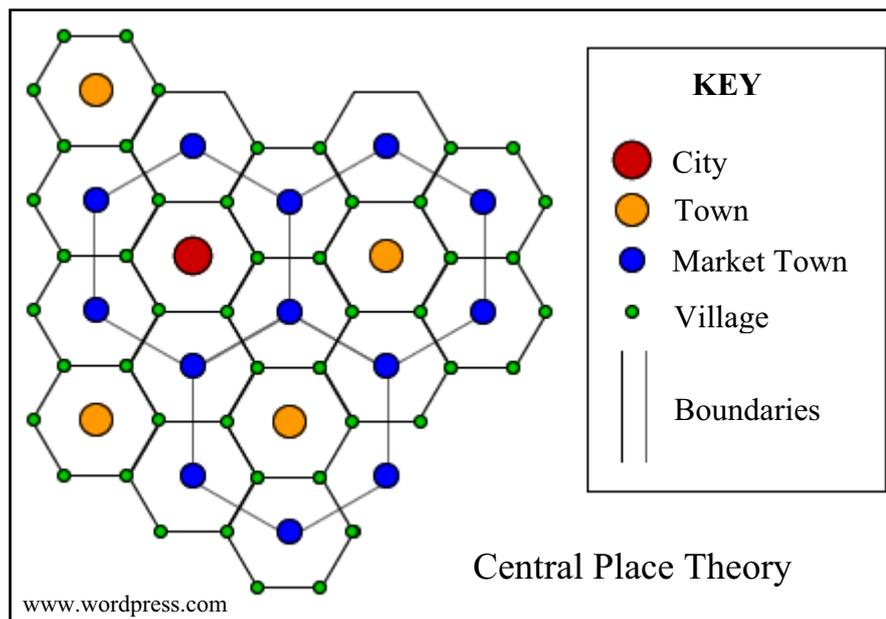
Reason stated 2 marks

Map evidence 2 marks

Explanation 3 x SRPs

- Map evidence must be specific i.e. grid reference or named rivers, etc.
- If the aerial photograph is used 0 marks as OS map area identified is not shown on the aerial photograph.

## C. Central Place Theory



Explain the importance of hierarchy and hinterland in Central Place Theory.

[30m]

Explanation 15 x SRPs

- Credit 2 examples for 2 x SRPs from explanation.



**B. Urban Functions**

Examine the aerial photograph accompanying this paper.  
Describe and explain **three** different functions of Dungarvan, using evidence from the aerial photograph to illustrate each function.

**[30m]**

Three functions	@ 10 marks each
For each function:	
Function named	2 marks
Aerial photo evidence	2 marks
Examination	3 x SRPs

- Accepted notation (right background etc.) required for aerial photograph evidence.

**C. Population**

Examine the influence/impact of **one** of the following on population growth:

- Society and culture
- Income levels
- Technology.

**[30m]**

Impact / influence identified	2 marks
Examination	14 x SRPs

- Credit 2<sup>nd</sup> named impact / influence for 1 x SRP.
- Discussion without reference to population growth max 2 x SRPs.
- Credit two examples for 2 x SRPs from examination.

## **SECTION 3 – OPTIONS**

**Questions 13 to 24**

Attempt **ONE** question

**Note:** It is better to discuss **three** or **four** aspects of the theme in some detail, rather than to give a superficial treatment of a large number of points.

## Questions 13 - 24

### Outline Marking Scheme and Overall Coherence (OC) marking descriptors

#### Outline Marking Scheme:

Number of aspects	3 @ 20 marks each	4 @ 15 marks each
Identifying aspect	4 marks	3 marks
Discussion	8 x SRPs	6 x SRPs
Overall Coherence	20 marks graded*	20 marks graded*

#### Marking Descriptors Overall Coherence (OC):

In awarding Overall Coherence (OC) the examiner will consider how well the candidate deals with the set question and will follow the following marking descriptors:

<b>*Overall Coherence (20 marks)</b>		
Excellent	<b>20</b>	Excellent, comprehensive response demonstrating detailed knowledge of subject matter. Excellent ability to relate knowledge to the question.
Very Good	<b>17</b>	Very good response. Very broad knowledge of the subject matter demonstrated. Considerable strength in relating the knowledge to the set question.
Good	<b>14</b>	Good response with worthwhile information. Broad knowledge of the subject matter. Reasonable capacity to relate knowledge appropriately to the set question.
Fair	<b>10</b>	Basic grasp of subject matter with main points covered but limited detail. Some effort to relate knowledge to the set question but only a basic understanding displayed.
Weak	<b>6</b>	Identified some relevant but limited information and has engaged with the set question to some extent.
Poor	<b>0</b>	General misunderstanding of the question. Failure to address the question resulting in a largely irrelevant answer.

## Global Interdependence

**Note:** It is better to discuss **three** or **four** aspects of the theme in some detail, rather than to give a superficial treatment of a large number of points.

13. Views of development and underdevelopment are subject to change.  
Discuss.

[80m]

Number of aspects	3 @ 20marks each	4 @ 15 marks each
Identifying aspect	4 marks	3 marks
Discussion	8 x SRPs	6 x SRPs
Overall Coherence	20 marks graded*	20 marks graded*

- Focus of question is "change".
- Select scheme according to number of aspects discussed.
- Allow for up to 3 examples to a max of 3 x SRPs (different examples and in different aspects).
- Allow for up to 2 labelled illustrations to a max of 2 x SRPs (different illustrations and in different aspects).

14. Examine how land ownership patterns have impacted on development.

[80m]

Number of aspects	3 @ 20 marks each	4 @ 15 marks each
Identifying aspect	4 marks	3 marks
Discussion	8 x SRPs	6 x SRPs
Overall Coherence	20 marks graded*	20 marks graded*

- Focus of question is on the "impact" of landownership patterns on development.
- Select scheme according to number of aspects discussed.
- Allow for up to 3 examples to a max of 3 x SRPs (different examples and in different aspects).
- Allow for up to 2 labelled illustrations to a max of 2 x SRPs (different illustrations and in different aspects).

15. We live in an interdependent global economy. Actions or decisions taken in one area have an impact on other areas.  
Discuss this statement with reference to global warming.

[80m]

Number of aspects	3 @ 20 marks each	4 @ 15 marks each
Identifying aspect	4 marks	3 marks
Discussion	8 x SRPs	6 x SRPs
Overall Coherence	20 marks graded*	20 marks graded*

- Focus of question is impact of actions or decisions in one area impacting on global warming.
- Select scheme according to number of aspects discussed.
- Allow for up to 3 examples to a max of 3 x SRPs (different examples and in different aspects).
- Allow for up to 2 labelled illustrations to a max of 2 x SRPs (different illustrations and in different aspects).

## Geoecology

**Note:** It is better to discuss **three** or **four** aspects of the theme in some detail, rather than to give a superficial treatment of a large number of points.

16. Explain how soil characteristics impact on soil development.

[80m]

Number of aspects	3 @ 20 marks each	4 @ 15 marks each
Identifying aspect	4 marks	3 marks
Discussion	8 x SRPs	6 x SRPs
Overall Coherence	20 marks graded*	20 marks graded*

- Focus of question is the impact of soil characteristics on soil development.
- Select scheme according to number of aspects discussed.
- Allow for up to 3 examples to a max of 3 x SRPs (different examples and in different aspects).
- Allow for up to 2 labelled illustrations to a max of 2 x SRPs (different illustrations and in different aspects).

17. Soil profiles are the result of the operation of soil-forming processes.  
Discuss.

[80m]

Number of aspects	3 @ 20 marks each	4 @ 15 marks each
Identifying aspect	4 marks	3 marks
Discussion	8 x SRPs	6 x SRPs
Overall Coherence	20 marks graded*	20 marks graded*

- Focus of question is the impact / effect of soil-forming processes on soil profiles.
- Select scheme according to number of aspects discussed.
- Allow for up to 3 examples to a max of 3 x SRPs (different examples and in different aspects).
- Allow for up to 2 labelled illustrations to a max of 2 x SRPs (different illustrations and in different aspects).

18. Biomes are altered by human activity.  
Discuss.

[80m]

Number of aspects	3 @ 20 marks each	4 @ 15 marks each
Identifying aspect	4 marks	3 marks
Discussion	8 x SRPs	6 x SRPs
Overall Coherence	20 marks graded*	20 marks graded*

- Focus of question is on human activity altering biomes.
- Select scheme according to number of aspects discussed.
- Allow for up to 3 examples to a max of 3 x SRPs (different examples and in different aspects).
- Allow for up to 2 labelled illustrations to a max of 2 x SRPs (different illustrations and in different aspects).

## Culture and Identity

**Note:** It is better to discuss **three** or **four** aspects of the theme in some detail, rather than to give a superficial treatment of a large number of points.

19. Examine the importance of religion as a cultural indicator.

[80m]

Number of aspects	3 @ 20 marks each	4 @ 15 marks each
Identifying aspect	4 marks	3 marks
Discussion	8 x SRPs	6 x SRPs
Overall Coherence	20 marks graded*	20 marks graded*

- Focus of question is how religion is important as a cultural indicator.
- Select scheme according to number of aspects discussed.
- Allow for up to 3 examples to a max of 3 x SRPs (different examples and in different aspects).
- Allow for up to 2 labelled illustrations to a max of 2 x SRPs (different illustrations and in different aspects).

20. The existence of different cultural groups within state borders can lead to conflict. Discuss.

[80m]

Number of aspects	3 @ 20 marks each	4 @ 15 marks each
Identifying aspect	4 marks	3 marks
Discussion	8 x SRPs	6 x SRPs
Overall Coherence	20 marks graded*	20 marks graded*

- Focus of question is how conflict can occur when there are different cultural groups within state borders.
- Select scheme according to number of aspects discussed.
- Allow for up to 3 examples to a max of 3 x SRPs (different examples and in different aspects).
- Allow for up to 2 labelled illustrations to a max of 2 x SRPs (different illustrations and in different aspects).

21. Examine the strategies that have been or could be implemented to aid the survival of minority languages.

[80m]

Number of aspects	3 @ 20 marks each	4 @ 15 marks each
Identifying aspect	4 marks	3 marks
Discussion	8 x SRPs	6 x SRPs
Overall Coherence	20 marks graded*	20 marks graded*

- Focus of question is strategies to aid the survival of minority languages.
- Select scheme according to number of aspects discussed.
- Allow for up to 3 examples to a max of 3 x SRPs (different examples and in different aspects).
- Allow for up to 2 labelled illustrations to a max of 2 x SRPs (different illustrations and in different aspects).

## The Atmosphere - Ocean Environment

**Note:** It is better to discuss **three** or **four** aspects of the theme in some detail, rather than to give a superficial treatment of a large number of points.

22. Examine the uneven distribution of temperature over the earth's surface.

[80m]

Number of aspects	3 @ 20 marks each	4 @ 15 marks each
Identifying aspect	4 marks	3 marks
Discussion	8 x SRPs	6 x SRPs
Overall Coherence	20 marks graded*	20 marks graded*

- Focus of question is the uneven distribution of temperature over the earth's surface.
- Select scheme according to number of aspects discussed.
- Allow for up to 3 examples to a max of 3 x SRPs (different examples and in different aspects).
- Allow for up to 2 labelled illustrations to a max of 2 x SRPs (different illustrations and in different aspects).

23. Exchanges of water between oceans and atmosphere, over the earth's surface, impact on precipitation and its distribution patterns.  
Discuss.

[80m]

Number of aspects	3 @ 20 marks each	4 @ 15 marks each
Identifying aspect	4 marks	3 marks
Discussion	8 x SRPs	6 x SRPs
Overall Coherence	20 marks graded*	20 marks graded*

- Focus of question is the impact of exchanges of water between oceans and atmosphere, over the earth's surface, on precipitation and its distribution patterns.
- Select scheme according to number of aspects discussed.
- Allow for up to 3 examples to a max of 3 x SRPs (different examples and in different aspects).
- Allow for up to 2 labelled illustrations to a max of 2 x SRPs (different illustrations and in different aspects).

24. Climate characteristics impact on economic development.  
Discuss.

[80m]

Number of aspects	3 @ 20 marks each	4 @ 15 marks each
Identifying aspect	4 marks	3 marks
Discussion	8 x SRPs	6 x SRPs
Overall Coherence	20 marks graded*	20 marks graded*

- Focus of question is the impact of climate characteristics on economic development.
- Select scheme according to number of aspects discussed.
- Allow for up to 3 examples to a max of 3 x SRPs (different examples and in different aspects).
- Allow for up to 2 labelled illustrations to a max of 2 x SRPs (different illustrations and in different aspects).

**Read entire report before commencing marking to familiarise yourself with the entire investigation**

Simple statements are not acceptable. Require qualification.

**1. INTRODUCTION (5 marks):**

4 x SRPs:	1 mark each
Overall Coherence:	1 mark

**2. PLANNING (5 marks):**

4 x SRPs:	1 mark each
Overall Coherence:	1 mark

**3. GATHERING OF DATA (40 marks):**

Two methods / tasks @ 20 marks each.

For each method / task:	9 x SRPs @ 2 marks each
Overall coherence:	4 marks graded

- The gathering section must be activity based.
- A method may be a task which is a group of relevant linked activities.
- Credit may be given to diagrams / sketches if they relate to the activity of gathering.
- Do not award marks for results in this written section.

**4. RESULTS, CONCLUSIONS, EVALUATION (30 marks):**

Three headings @ 8 marks each.

For each heading:	4 x SRPs @ 2 marks each
Overall coherence:	6 marks graded

- Conclusions are based directly or indirectly on the results, otherwise it is evaluation.
- Evaluation can be forward-thinking as well as retrospective.
- Only award marks for Results / Conclusions / Evaluations in the appropriate section of the booklet.
- Results / Conclusions / Evaluations should be tied to aims.

**5. ORGANISATION & PRESENTATION OF RESULTS (20 marks):**

Presentation: 8 x SRPs @ 2 marks each

Overall coherence: 4 marks graded

- Two different graphic forms of presentation required - such as graphs / charts / maps / tables / sketches etc.
- Presentation to appear on the appropriate graph pages.
- Maximum of 4 x SRPs per presentation.

## BREAKDOWN OF PRESENTATION MARKS

### **BAR CHART / TREND GRAPH / SCATTER GRAPH etc.:**

Suitable Title	2 marks
1 axis with units or scale:	1 x SRP = 2 marks
Each of 2 correctly drawn & labelled points / bars:	2 x SRP = 4 marks

### **PIE CHART:**

Suitable Title:	1 x SRP = 2 marks
Circle with correctly placed centre:	1 x SRP = 2 marks
Each of 2 correctly drawn & labelled sectors:	2 x SRP = 4 marks

### **RANK ORDER TABLE / TABLE:**

#### **Multiple Row/Column Table**

Suitable Title:	1 x SRP = 2 marks
Box:	1 x SRP = 2 marks
Rows / Columns x2 labelled:	2 x SRP = 2 + 2 marks

#### **Single Row / Column Table**

Suitable Title:	1 x SRP = 2 marks
Box:	1 x SRP = 2 marks
Row / Column labelled:	1 x SRP = 2 marks
Relevant information:	1 x SRP = 2 marks

### **SKETCH/MAP:**

Suitable Title:	1 x SRP = 2 marks
Frame:	1 x SRP = 2 marks
Two relevant pieces of information re results:	2 x SRP = 4 marks

# List of Geographical Investigation Topics 2014

1. A study of the geomorphic processes of transportation **and** deposition in a fluvial or coastal or glaciated environment.
2. An investigation of the impact of human activity on the geomorphic processes in a fluvial or coastal or glaciated environment.
3. Analysis of the relationship between land-use and traffic flow in a local area.
4. A study of waste management in a local area.
5. Changing demographic patterns in a local area.
6. A study of local weather patterns.

## Marcanna Breise as ucht freagairt trí Ghaeilge

Léiríonn an tábla thíos an méid marcanna breise ar chóir a bhronnadh ar iarrthóirí a ghnóthaíonn thar 75% d'iomlán na marcanna.

N.B. Ba chóir marcanna de réir an ghnáthráta a bhronnadh ar iarrthóirí nach ngnóthaíonn thar 75% d'iomlán na marcanna. Ba chóir freisin an marc bónais sin a shlánú síos.

Iomlán: 400 Gnathráta: 10%

Bain úsáid as an ngnáthráta i gcás marcanna suas go 300. Thar an marc sin, féach an tábla thíos.

Bunmharc	Marc Bónais
301 - 303	29
304 - 306	28
307 - 310	27
311 - 313	26
314 - 316	25
317 - 320	24
321 - 323	23
324 - 326	22
327 - 330	21
331 - 333	20
334 - 336	19
337 - 340	18
341 - 343	17
344 - 346	16
347 - 350	15

Bunmharc	Marc Bónais
351 - 353	14
354 - 356	13
357 - 360	12
361 - 363	11
364 - 366	10
367 - 370	9
371 - 373	8
374 - 376	7
377 - 380	6
381 - 383	5
384 - 386	4
387 - 390	3
391 - 393	2
394 - 396	1
397 - 400	0

Geographical Investigation – Not included in total for bonus marks.

Note: Modified marking scheme available for candidates who sat a modified examination paper.

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