



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

**Leaving Certificate 2012**

**Marking Scheme**

**Geography**

**Higher Level**



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. Requirements and mark allocations may therefore vary from year to year.

## 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

8 parts @ 1 mark each

- Q.1 A = Lateral moraine  
B = Arête  
C = Pyramidal peak  
D = Corrie/Coom/Cirque
- Q.2 (i) A  
C  
  
B  
(ii) Limestone
- Q.3 (i) True  
(ii) True  
(iii) False  
(iv) True
- Q.4 G  
C  
B  
H  
A  
E  
D  
F
- Q.5 (i) Destructive / Convergent  
(ii) Continental  
(iii) Subduction  
(iv) Asthenosphere / Upper mantle
- Q.6 (i) C  
D  
A  
B  
(ii) Two definitions @ 2marks each
- Q.7 D Tectonic uplift  
B Mass movement  
A Volcanic activity  
C Chemical weathering
- Q.8 (i) Jamestown canal  
(ii) Crannóg  
Clós, Ráth, Lios, Ringfort  
(iii) Drumlin  
(iv) North East / NE
- Q.9 (i) False  
(ii) South / SW / SSW  
(iii) Killukin River  
(iv) M 940/939 987/8
- Q.10 D  
C  
A  
B
- Q.11 (i) 8.1  
(ii) Mid-West  
(iii) 83,427  
(iv) Valid reason 1+1
- Q.12 (i) Finland  
(ii) Austria  
(iii) Denmark  
(iv) Accept all answers for 2 marks

## **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. Aerial Photograph

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

- The complete course of the largest river
- The tributary river in the left background
- Locate the confluence and mark it with an X on the sketch map
- A drumlin.

[20m]

Proportion + Frame:	2+2 marks
4 features @ 4 marks each	Shown 3 marks (graded 3/1/0)
	Named 1 mark

- Proportion involves showing correct scale
- If sketch is traced or a section of the aerial photograph is drawn, lose 2 marks for proportion & 3 marks for showing per item
- If only a portion of the largest river is shown, 3/1/0 for shown but 1 marks for naming

#### B. Sedimentary and Metamorphic Rocks

Describe the formation of **one** sedimentary rock that you have studied **and** briefly explain how this rock may be transformed into a metamorphic rock.

[30m]

Name one sedimentary rock	2 marks
Name the metamorphic rock	2 marks
Formation of sedimentary rock	11 x SRPs
Formation of metamorphic rock	2 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 2 x SRPs for description of sedimentary rock when only a description of sedimentary rock is given

### C. Earthquakes

Explain, with reference to examples that you have studied, how the theory of plate tectonics helps to explain the distribution of earthquakes around the world.

[30m]

Global examples/locations of earthquakes

2+2 marks

Discussion

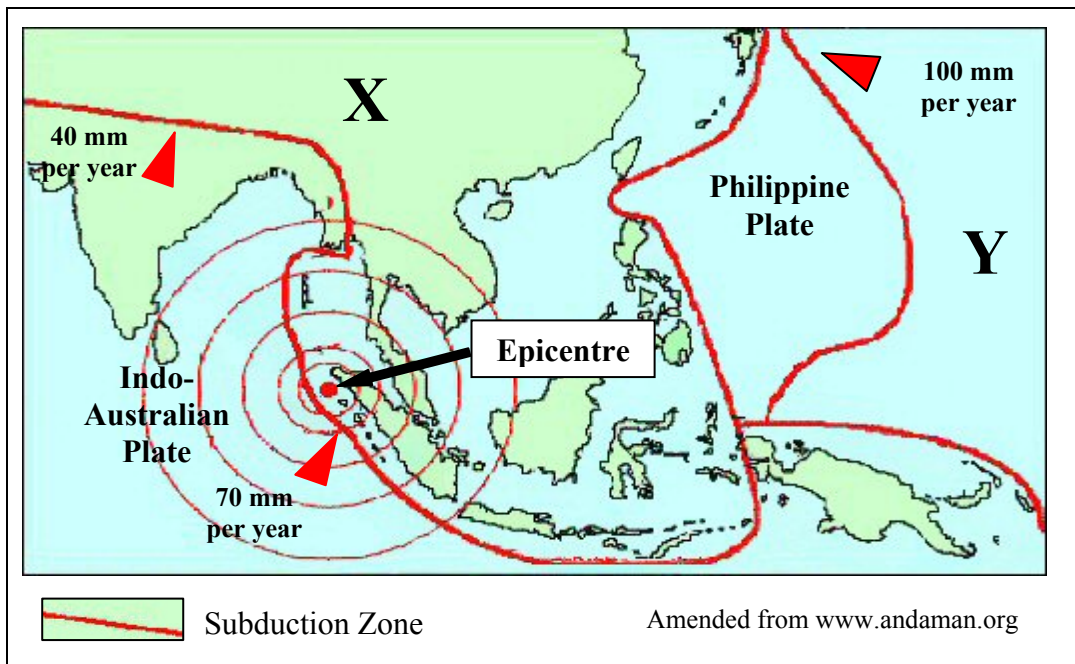
13 x SRPs

- If no link made between the theory of plate tectonics and earthquakes, maximum of 6 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



## Question 2

### A. Plate Tectonics – Earthquakes



Examine the map above and answer the following questions.

- Name the plates marked X and Y.
- What is the average annual movement of the Indo-Australian Plate?
- Explain what is meant by the term 'epicentre'.
- Given that the epicentre of the earthquake shown above is off shore, name and briefly explain the main effect of this earthquake on the sea.
- Name **two** scales that measure the magnitude/intensity of an earthquake.

[20m]

- |       |                       |             |
|-------|-----------------------|-------------|
| (i)   | X = Eurasian          | 2 marks     |
|       | Y = Pacific           | 2 marks     |
| (ii)  | 55 mm                 | 2 marks     |
| (iii) | Any valid explanation | 2 + 2 marks |
| (iv)  | Tsunami               | 4 marks     |
|       | Any valid explanation | 2 marks     |
| (v)   | Any two scales        | 2 + 2 marks |

## B. Landform Development

Answer (i) or (ii).

- (i) Explain with the aid of a labelled diagram(s) the formation of **one** landform of deposition that you have studied.

[30m]

Named landform	2 marks
Labelled diagram	4 marks (graded 4/2/0)
Explanation	12 x SRPs

- Credit extra relevant information on labelled diagram for 2 x SRPs
- Diagram without labelling = 0 marks
- Credit 2 x SRPs for description of landform when only a description of the landform is given
- Allow 1 SRP for example from explanation

Or

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

[30m]

Process named	2 marks
Discussion	14 x SRPs

- Credit 1 SRP for relevant labelled diagram
- Credit extra relevant information on labelled diagram for 2 x SRPs
- Diagram without labelling = 0 marks
- Credit one example from discussion
- Allow max 7x SRPs if description of mass movement only

### C. Surface Processes

Examine, with reference to example(s) that you have studied, how human activities have impacted on **either** river, coastal **or** mass movement processes.

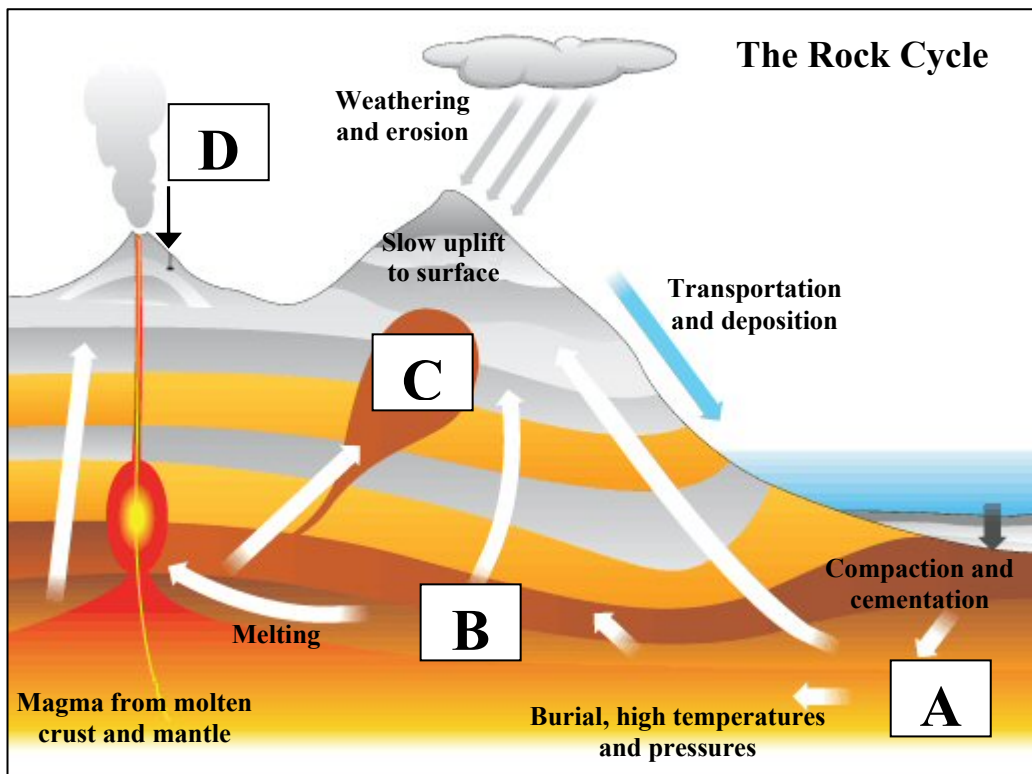
[30m]

Human activity identified	2 marks
Impact identified	2 marks
Named example	2 marks
Examination	12 x SRPs

- Credit 1 SRP for relevant labelled diagram
- Credit extra relevant information on labelled diagram for 2 x SRPs
- Credit 2<sup>nd</sup> example named from examination
- All further examples require examination
- All further impacts require examination
- Examples not tied to Ireland
- Credit 2 x SRPs for description of human activity when only a description of human activity is given
- Amalgamate all relevant discussion

### Question 3

#### A. Rock Cycle



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Examine the diagram of the rock cycle above and answer the following questions.

- (i) Name the category of rock formed at **A** and name **one** example of this category of rock.
- (ii) Name the category of rock formed at **B** and name **one** example of this category of rock.
- (iii) Name **one** example of an igneous rock which is formed at **C**.
- (iv) Name **one** example of an igneous rock which is formed at **D**.
- (v) Briefly explain the difference between the process of weathering and the process of erosion.

[20m]

5 Parts @ 4 marks each

- |       |                              |             |
|-------|------------------------------|-------------|
| (i)   | <b>A</b> - Sedimentary       | 2 marks     |
|       | Example                      | 2 marks     |
| (ii)  | <b>B</b> - Metamorphic       | 2 marks     |
|       | Example                      | 2 marks     |
| (iii) | <b>C</b> - Any valid example | 4 marks     |
| (iv)  | <b>D</b> - Any valid example | 4 marks     |
| (v)   | Any valid explanation        | 2 + 2 marks |

## B. Limestone Pavement

With the aid of a diagram(s), explain how chemical weathering has shaped the limestone pavement in a karst region.

[30m]

Named process	2 marks
Labelled diagram(s)	4 marks (graded 4/2/0)
Explanation	12 x SRPs

- Credit extra relevant information on labelled diagram for 2 x SRPs
- Diagram without labelling = 0 marks
- Example not tied to Ireland
- Allow 1 SRP for an example of a karst region from examination
- All further processes require examination
- Credit 2 x SRPs for description of limestone pavement when only a description of the limestone pavement is given

## C. Folding

Explain, with reference to examples that you have studied, how folding impacts on landscape development.

[30m]

Examples	2 + 2 marks
Discussion	13 x SRPs

- Credit 1 SRP for relevant labelled diagram
- Credit extra relevant information on labelled diagram for 2 x SRPs
- Diagram without labelling = 0 marks
- If no link between folding and impacting on the landscape max 6 x SRPs

## REGIONAL GEOGRAPHY

### Questions 4 to 6

Attempt **ONE** question

#### Question 4

##### A. Continental / Sub-Continental Region

Draw an outline map of a **Continental / Sub-Continental** region (not in Europe) that you studied.

On it show and name the following:

- A named feature of relief
- A named river
- A named urban centre
- A major road or rail link.

[20m]

Map outline	4 marks graded (4/2/0)
4 features @	4 marks each:
Shown	2 marks graded (2/1/0)
Named	2 marks

##### B. Agriculture in Europe

Account for the development of agriculture in a **European** region (not in Ireland) that you have studied, with reference to any **two** of the factors listed below:

- Relief
- Markets
- Climate.

[30m]

Discussion of Factor 1	8 x SRPs
Discussion of Factor 2	7 x SRPs

- Do not accept Irish or Continental / Sub Continental region
- Discussion without link to a named or clearly inferred region = 0 marks

### C. **Population in Ireland**

Account for the distribution of population throughout an **Irish** region that you have studied.

[30m]

Examination 15 x SRPs

- Do not accept European or Continental Sub / Continental region
- Discussion without link to a named or clearly inferred region = 0 marks
- Max 7 x SRPs for description only in examination

## Question 5

### A. Irish Agricultural Trade

#### Irish Meat and Livestock Exports

Species	2009 €m	2010 €m	%change 2009-2010
Beef	1,397	1,510	+8
Pigmeat	289	317	+10
Poultry	183	200	+9
Sheepmeat	164	170	+4
Live animals	213	245	<b>X</b>
TOTAL	2,246	2,442	+9

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Examine the table above and answer the following questions.

- (i) Calculate **X**, the percentage change for Live animal exports, between 2009 and 2010.
- (ii) Which species had the lowest percentage increase between 2009 and 2010?
- (iii) What was the increase in the monetary value of beef exports between 2009 and 2010?
- (iv) Briefly explain **one** advantage of agricultural exports to the Irish economy.
- (v) Briefly explain **one** challenge that Irish agriculture will face in the future.

[20m]

Five parts @ 4 marks each

- (i) 15.02/15                      4 marks
- (ii) Sheepmeat                      4 marks
- (iii) €113 million                      4 marks
- (iv) Valid explanation                      2 + 2 marks
- (v) Valid explanation                      2+ 2 marks



## B. Concept of a Region

Examine, with reference to examples that you have studied, how the physical landscape can be used to define regions.

[30m]

Named specific locations	2 + 2 marks
Examination	13 x SRPs

## C. Economic Activities

Examine how any **two** of the factors listed below have influenced the development of **one** urban area in a **European** region (not in Ireland) that you have studied:

- Transport
- Location
- Primary economic activity.

[30m]

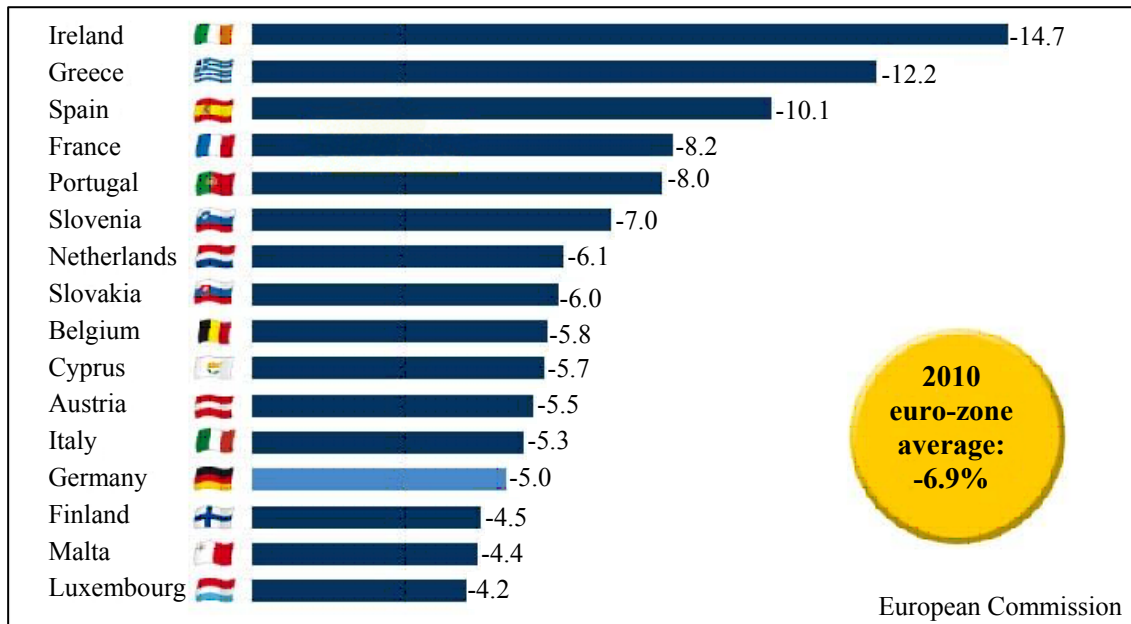
Urban area named	2 marks
Factor 1 examination	7 x SRPs
Factor 2 examination	7 x SRPs

- Do not accept Irish or Continental / Sub Continental region
- Examination without link to a named or clearly inferred urban area = 0 marks
- An urban area can be a city, a specific part of a named city, or areas such as the Randstad

## Question 6

### A. The European Union (EU) – ‘Euro Crisis’

**Budget deficits (as a percentage of gross domestic product)  
of euro-zone countries in 2010**



Examine the graph above and answer the following questions.

- (i) How many euro-zone countries had a budget deficit greater than the euro-zone average in 2010?
- (ii) What was the difference in the budget deficit (as a percentage of gross domestic product) between Ireland and Austria in 2010?
- (iii) Name **two** of the six founding member states of what is now the EU.
- (iv) Name **two** EU member states not in the euro-zone.
- (v) Briefly explain what is meant by the ‘Euro Crisis’.

[20m]

Five parts @ 4 marks each

- |       |                                  |             |
|-------|----------------------------------|-------------|
| (i)   | 6                                | 4 marks     |
| (ii)  | 9.2                              | 4 marks     |
| (iii) | Any two founding member states   | 2 + 2 marks |
| (iv)  | Any two members not in euro-zone | 2 + 2 marks |
| (v)   | Valid explanation                | 2 + 2 marks |

**B. Economic Activity**

Discuss the factors that influence the development of **one** tertiary economic activity in an **Irish** region that you have studied.

[30m]

Named tertiary economic activity	2 marks
Factors	2 + 2 marks
Discussion	12 x SRPs

- Do not accept European or Continental Sub / Continental region
- Discussion without link to a named or clearly inferred region = 0 marks
- All further factors require discussion
- Max 6 x SRPs if only one factor discussed

**C. The Dynamics of Regions – Human Processes**

Population dynamics	Language	Religion
Urban development	Rural development	

Examine the impact of any **two** of the above factors, on the development of a **Continental / Sub-Continental** region (not in Europe), that you have studied.

[30m]

Factor 1:	
Impact	2 marks
Examination	7 x SRPs

Factor 2	
Impact	2 marks
Examination	6 x SRPs

- Do not accept Irish or European regions
- Discussion without link to a named or clearly inferred region = 0 marks
- Max 7 x SRPs if only one factor examined

**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

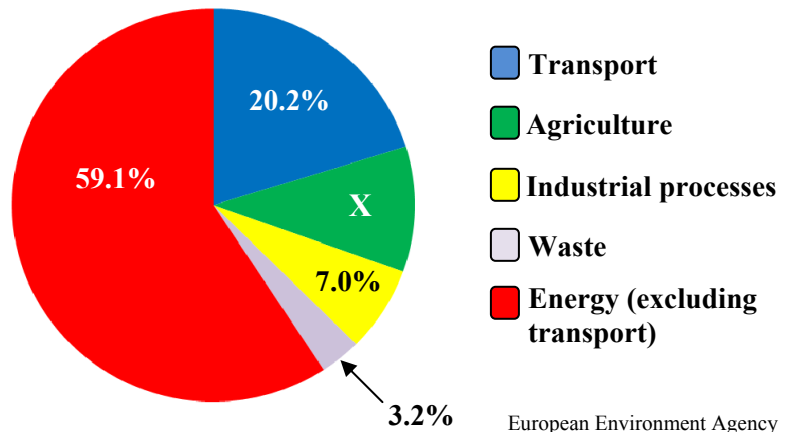
### Question 7

#### A. Greenhouse Effect

Total CO <sub>2</sub> (Greenhouse Gas) Emissions, 2009	
Region	CO <sub>2</sub> Emissions (million metric tons)
Africa	1,056
North America	6,954
Middle East	1,505
Asia and Oceania	11,219
Central & South America	1,384
Europe	4,720
Total	26,838

SAGE

Greenhouse Gas Emissions by Source Sector in Europe in 2009



European Environment Agency

Examine the information above and answer the following questions.

- (i) Which region had the highest CO<sub>2</sub> (greenhouse gas) emissions and which region had the lowest CO<sub>2</sub> (greenhouse gas) emissions in 2009?
- (ii) Calculate **X**, the percentage of greenhouse gas emissions generated by agriculture in Europe in 2009.
- (iii) Briefly explain **one** reason why Energy (excluding transport) was the sector which produced the highest percentage of greenhouse gas emissions in Europe in 2009.
- (iv) Name **two** greenhouse gases other than CO<sub>2</sub>.
- (v) State **two** ways the greenhouse effect impacts on agriculture.

[20m]

Five parts @ 4 marks each

- |                              |             |
|------------------------------|-------------|
| (i) Highest = Asia & Oceania | 2 marks     |
| Lowest = Africa              | 2 marks     |
| (ii) 10.5                    | 4 marks     |
| (iii) Valid explanation      | 2 + 2 marks |
| (iv) Two greenhouse gases    | 2 + 2 marks |
| (v) Two impacts stated       | 2 + 2 marks |

## B. Economic Development

Using evidence from the 1:50000 Ordnance Survey map that accompanies this paper, explain **three** factors that have influenced the development of economic activity in the area shown on the Ordnance Survey map.

[30m]

3 factors @ 10 marks each

For each factor:

Named factor	2 marks
Map evidence	2 marks
Explanation	3 x SRPs

- If answer is based on aerial photograph, allow marks for naming factors only
- If answer has no map evidence, allow marks for naming factors only
- Accept a max of two factors on different modes of transport

## C. European Union Policy

Examine how European Union policy influences regional development in Ireland.

[30m]

Influence named	2 marks
Examination	14 x SRPs

- Credit 2<sup>nd</sup> named influence for 1 SRPs from examination
- All other influences require examination
- Credit two named policies for 2 x SRPs from examination
- All further policies require discussion
- Max 2 SRPs for description of EU policy when only a description of EU policy is given
- Any further description of policy must be tied to the influences on regional development

## Question 8

### A. Energy Sources

**Estimated indigenous energy sources in Ireland in 2020  
(selected sources)**

Energy Source	Percentage
Natural gas	6.1
Peat	4.9
Solar	0.2
Hydro	0.9
Wind	2.6
Forest and woodland	5.2

Transition Ireland

Examine the data in the above table showing the estimated percentage of indigenous energy sources for Ireland in 2020.

[20m]

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

	<b>Bar Chart</b>	<b>Pie Chart</b>
Title	2 marks	2 marks
Each axis scaled	1+1 mark	1+1 mark (Circle & Centred)
6 items illustrated	2 marks each graded	2 marks each graded

- Accept any suitable graph/chart
- Naming of graph/chart type not sufficient for title mark
- If graph paper is not used deduct 2 marks from total

- (ii) Name **two** other sources of energy not named above.

Two other sources named @ 2 marks each

## B. Developing Economies

Examine the positive and the negative impacts of colonialism on a developing country that you have studied.

[30m]

Positive impact identified	2 marks
Negative impact identified	2 marks
Naming developing economy	2 marks
Examination	12 x SRPs

- Minimum 1 SRP for examination on positive impacts
- Minimum 1 SRP for examination on negative impacts
- Remaining SRPs can come from general examination on either positive impacts or negative impacts or both
- Examination without reference to named developing economy max 2 x SRPs
- Max 6 SRPs if only positive impact or only negative impact examined

## C. Economic Activities

Examine the factors that have influenced the development of footloose industries **or** tourism in a developed economy that you have studied.

[30m]

Footloose industry named	2 marks
Developed economy named	2 marks
Factors	2 + 2 marks
Examination	11 x SRPs

- Credit 2<sup>nd</sup> footloose industry named for 1 SRP from examination
- All further factors identified require discussion
- Discussion without reference to named developed economy max 2 x SRPs

**Or**

Named Tourist Activity	2 marks
Developed economy named	2 marks
Factors	2 + 2 marks
Examination	11 x SRPs

- Credit 2<sup>nd</sup> tourist activity named for 1 SRP from examination
- All further factors identified require discussion
- Discussion without reference to named developed economy max 2 x SRPs



## Question 9

### A. Aerial Photograph

Examine the aerial photograph of Carrick-on-Shannon accompanying this paper. Draw a sketch map of the aerial photograph, half the length and half the breadth. On it show and name each of the following:

- A large building under construction
- The bridge
- A large car park in the centre foreground
- An industrial area in the background.

[20m]

Proportion + Frame: 2+2 marks  
4 features @ 4 marks each: Shown 3 marks (graded 3/1/0)  
Named 1 mark

### B. Multinational Companies (MNC)

Examine how corporate strategies influence the opening and the closing of branch plants of **one** multinational company that you have studied.

[30m]

Named MNC 2 marks  
Corporate strategy named 2 marks  
Examination 13 x SRPs

- Credit two further strategies identified as SRPs from examination
- Discussion without reference to opening of branch plants max 7 x SRPs
- Discussion without reference to closure of branch plants max 7 x SRPs

### C. Conflict of Interest

Examine how conflict may develop between economic interests and environmental interests, with reference to example(s) that you have studied.

[30m]

Conflict identified 2 marks  
Reference to example 2 marks  
Examination 13 x SRPs

- Credit 2<sup>nd</sup> conflict identified for 1 SRP from examination
- Credit 2<sup>nd</sup> example referenced for 1 SRP from examination
- Examples can refer to region/conflict
- Max 6 x SRPs for discussion to one side of the argument only

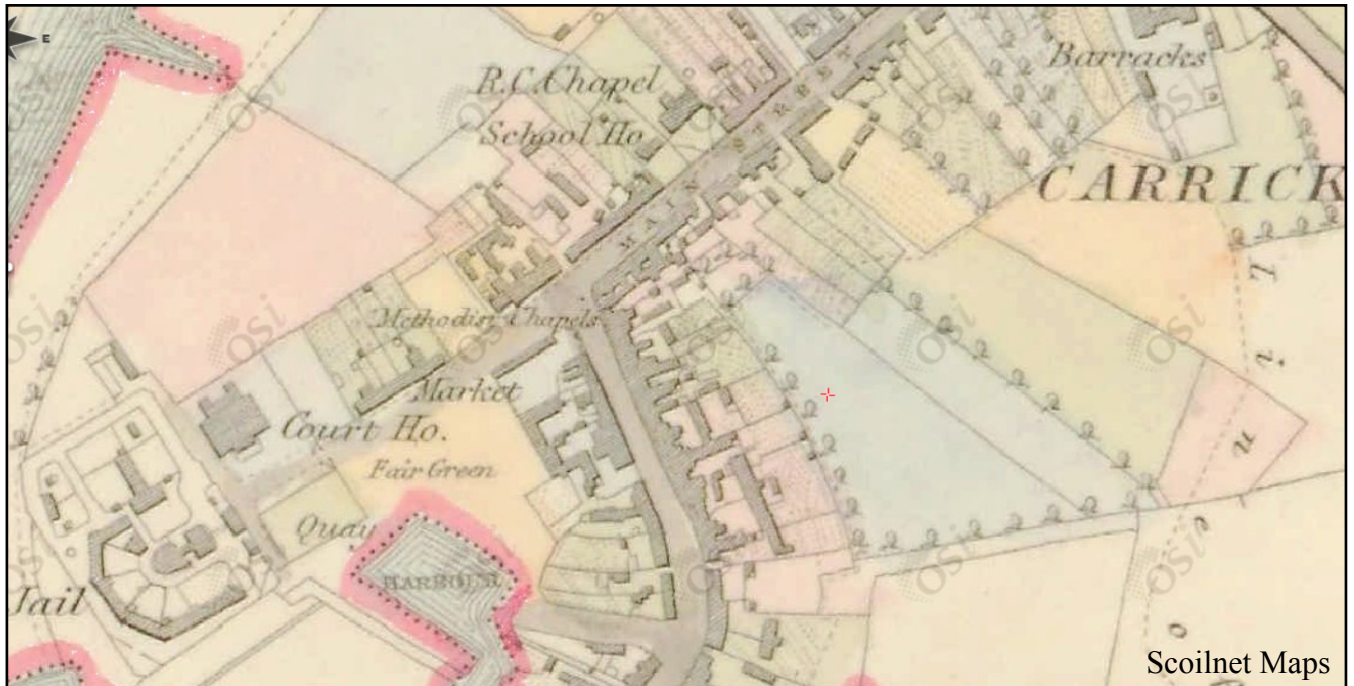
# PATTERNS AND PROCESSES IN THE HUMAN ENVIRONMENT

## Questions 10 to 12

### Question 10

#### A. Historical Map

#### Historical Map of Carrick-on-Shannon



Examine the historical map of Carrick-on-Shannon shown above.

Draw a sketch map of the historical map and on it show and name each of the following:

- Two connecting roads / streets
- The Fair Green
- The school
- An administrative building.

[20m]

Proportion + Frame

2 + 2 marks

4 features @ 4 marks each:

Shown 3 marks (graded 3/1/0)

Named 1 mark

## **B. Urbanisation**

‘Authorities in developing world cities have attempted to overcome the problem of rapid urban growth.’

Examine the above statement with reference to example(s) you have studied.

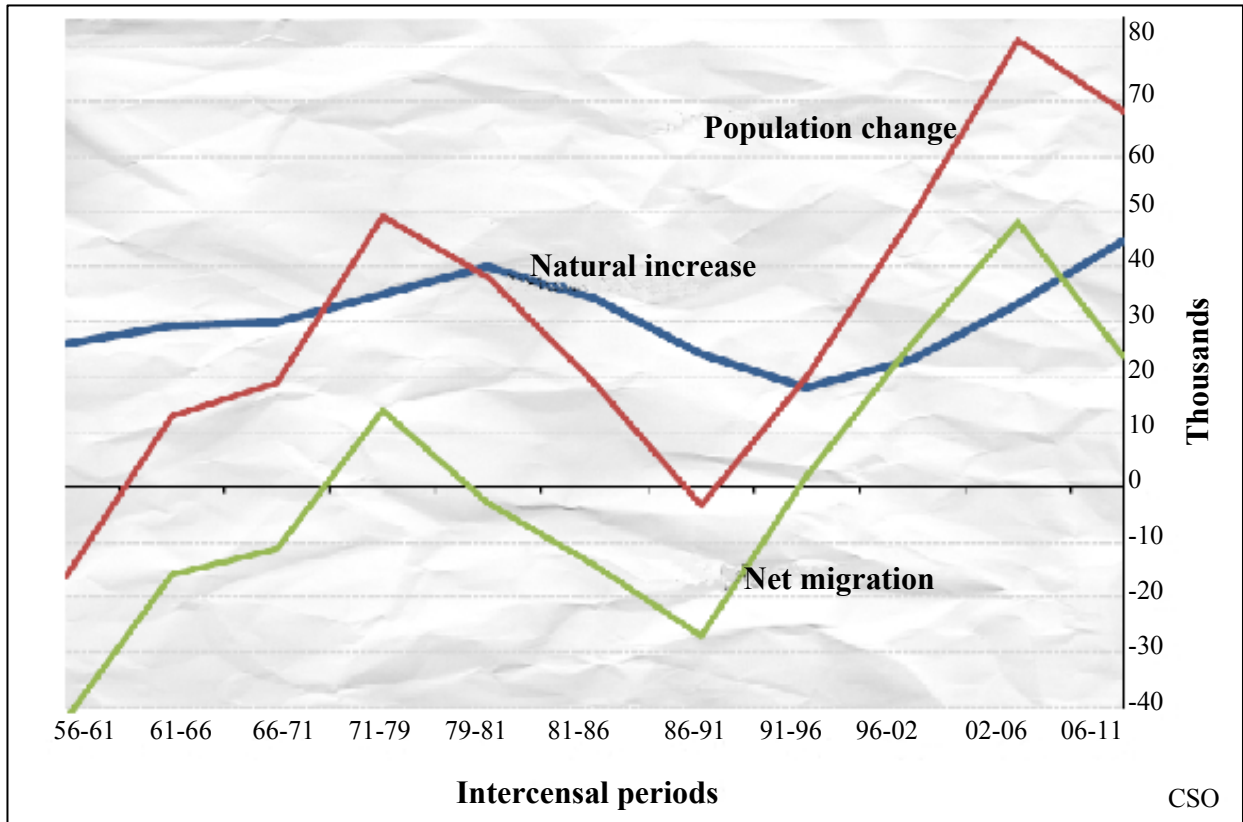
**[30m]**

Example named	2 marks
Examination	14 x SRPs

- If no reference to named developing world city/cities-do not award example marks
- Credit 2<sup>nd</sup> named example as SRP from examination
- Credit 2 x SRPs for description of problems of urban growth when only a description of problems of urban growth is given

**C. Population Change**

Components of Irish population change (average annual figures)  
for each inter-censal period, 1956-2011



With reference to the graph above, describe and explain **three** changes in Ireland's population between 1956 and 2011.

[30m]

Three changes @ 10 marks each

For each of the **three** changes:

Reference to graph

2 marks

Explanation

4 x SRPs

- If no reference to graph, allow 1 SRP per change identified from explanation SRPs

## Question 11

### A. Transport and Traffic

#### New vehicles registered by taxation class from January to August, 2008 to 2010

Taxation Class	2008	2009	2010
Private	137,566	49,142	73,689
Goods Vehicles	27,200	7,744	8,462
Tractors	3,579	1,583	1,081
Motor Cycles	2,508	1,553	1,048
Other	2,751	1,058	630
<b>Total</b>	<b>173,604</b>	<b>61,080</b>	<b>84,910</b>

CSO

Examine the table above and answer the following questions.

- (i) How many private vehicles were registered from January to August in 2009?
- (ii) What was the percentage decrease in goods vehicles registered from January to August between 2008 and 2009?
- (iii) Briefly explain **one** reason for this decrease.
- (iv) Statetwo causes of traffic congestion.
- (v) Briefly explain **one** way authorities attempt to solve the problem of traffic congestion.

[20m]

Five parts @ 4 marks each

- |       |                        |             |
|-------|------------------------|-------------|
| (i)   | 49,142                 | 4 marks     |
| (ii)  | 71.5/71.52             | 4 marks     |
| (iii) | Valid reason explained | 2 + 2 marks |
| (iv)  | Two causes stated      | 2 + 2 marks |
| (v)   | Valid explanation      | 2 + 2 marks |

## B. Urban Functions

Study the aerial photograph accompanying this paper.

Examine any **three** different functions of Carrick-on-Shannon, using evidence from the aerial photograph to support your answer.

[30m]

Three functions @ 10 marks each

For each of the three functions:

Named function	2 marks
Location of evidence on the aerial photograph	2 marks
Explanation	3 x SRPs

- If answer is based on OS map, allow marks for naming function only

## C. Demographic Change

Explain how improvements in technology impact on population growth, with reference to examples that you have studied.

[30m]

Examples of specific improvements in technology	2 + 2 marks
Impacts named	2 + 2 marks
Examination	11 x SRPs

- All further impacts require examination
- Allow Max 6 x SRPs if discussion on one improvement in technology only

## Question 12

### A. Life Expectancy

**Female Life Expectancy at Birth(years)**

Country	1990	2009
Bulgaria	75	77
Ireland	78	83
Germany	80	83

Eurostat

Examine the data in the table above showing female life expectancy at birth in a number of European countries.

[20m]

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

	<b>Bar Chart</b>	<b>Pie Chart</b>
Title	2 marks	2 marks
Each axis	1+1 mark	1+1 mark (Circle & Centred)
6 items illustrated	2 marks each graded	2 marks each graded

- Accept any suitable graph/chart
- If graph paper is not used deduct 2 marks from total
- Two pie charts must be presented for full marks
- Naming of graph/chart type not sufficient for title mark

(ii) State **two** reasons why life expectancy in general is increasing in Europe.

Two reasons stated at 2 marks each

## B. Population Distribution

With reference to the Ordnance Survey map that accompanies this paper, use settlement information to explain the main features of the distribution of population in the area shown on the map.

[30m]

Two map evidence	2 + 2 marks
Two features of distribution	2 + 2 marks
Explanation	11 x SRPs

- Credit 3<sup>rd</sup> map reference for 1 SRP from examination
- Credit 3<sup>rd</sup> feature of distribution identified for 1 SRP from examination
- If no reference to map, credit features of distribution identified to a max of 3 x SRPs

## C. Changing Land-Use Patterns

Describe and explain the changing land-use patterns in an urban area that you have studied.

[30m]

Land use patterns identified	2 + 2 marks
Named urban area	2 marks
Examination	12 x SRPs

- Examination without reference to named or clearly inferred urban area = 0 marks
- An urban area can be a city, a specific part of a named city, or areas such as the Randstad
- All further land-use patterns identified require discussion
- If no explanation max 6 x SRP



## **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.

## 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. Examine the impact of Non-Governmental Organisations (NGOs) in empowering people, with reference to examples that you have studied.

[80m]

Number of aspects:	3 @ 27 + 27 + 26	4 @ 20 marks each
Identifying aspect:	4 marks	4 marks
Discussion:	8 x SRPs	OR 6 x SRPs
Overall coherence:	7/6 marks graded	4 marks graded

- Select scheme according to number of aspects discussed
- Allow for up to 2 examples to a max of 2 SRPs (different examples and in different aspects)
- Allow for up to 2 labelled illustrations to a max of 2SRPs (different illustrations and in different aspects)

14. Examine the role that national debt, fair trade and land ownership patterns play in the economic development of developing countries.

[80m]

Number of aspects:	3 @ 27 + 27 + 26	4 @ 20 marks each
Identifying aspect:	4 marks	4 marks
Discussion:	8 x SRPs	OR 6 x SRPs
Overall coherence:	7/6 marks graded	4 marks graded

- Select scheme according to number of aspects discussed
- Allow for up to 2 examples to a max of 2 SRPs (different examples and in different aspects)
- Allow for up to 2 labelled illustrations to a max of 2SRPs (different illustrations and in different aspects)

15. Examine the causes and impacts of deforestation on a local and a global scale.

[80m]

Number of aspects:	3 @ 27 + 27 + 26	4 @ 20 marks each
Identifying aspect:	4 marks	4 marks
Discussion:	8 x SRPs	OR 6 x SRPs
Overall coherence:	7/6 marks graded	4 marks graded

- Select scheme according to number of aspects discussed
- Allow for up to 2 examples to a max of 2 SRPs (different examples and in different aspects)
- Allow for up to 2 labelled illustrations to a max of 2SRPs (different illustrations and in different aspects)
- A ratio of 1:2 or 2:1 or 2:2 or 1:3 or 3:1 is required

## Geocology

**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 weathering, leaching and podzolisation have impacted on the characteristics of soil.

[80m]

Number of aspects:	3 @ 27 + 27 + 26	4 @ 20 marks each
Identifying aspect:	4 marks	4 marks
Discussion:	8 x SRPs	OR 6 x SRPs
Overall coherence:	7/6 marks graded	4 marks graded

- Select scheme according to number of aspects discussed
- Allow for up to 2 examples to a max of 2 SRPs (different examples and in different aspects)
- Allow for up to 2 labelled illustrations to a max of 2SRPs (different illustrations and in different aspects)

17. Discuss how human activities can accelerate soil erosion.

[80m]

Number of aspects:	3 @ 27 + 27 + 26	4 @ 20 marks each
Identifying aspect:	4 marks	4 marks
Discussion:	8 x SRPs	OR 6 x SRPs
Overall coherence:	7/6 marks graded	4 marks graded

- Select scheme according to number of aspects discussed
- Allow for up to 2 examples to a max of 2 SRPs (different examples and in different aspects)
- Allow for up to 2 labelled illustrations to a max of 2SRPs (different illustrations and in different aspects)

18. Examine how any **three** of the activities listed below can impact on biomes:

- early settlement and the clearing of forests
- the felling of tropical rain forests
- intensive agricultural practices
- industrial development.

[80m]

Number of aspects:	3 @ 27 + 27 + 26
Identifying aspect:	4 marks
Discussion:	8 x SRPs
Overall coherence:	7/6 marks graded

- Allow for up to 2 examples to a max of 2 SRPs (different examples and in different aspects)
- Allow for up to 2 labelled illustrations to a max of 2SRPs (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. Conflicts can occur between national governments and cultural groups.  
Discuss.

[80m]

Number of aspects:	3 @ 27 + 27 + 26	4 @ 20 marks each
Identifying aspect:	4 marks	4 marks
Discussion:	8 x SRPs	OR 6 x SRPs
Overall coherence:	7/6 marks graded	4 marks graded

- Select scheme according to number of aspects discussed
- Allow for up to 2 examples to a max of 2 SRPs (different examples and in different aspects)
- Allow for up to 2 labelled illustrations to a max of 2SRPs (different illustrations and in different aspects)

20. Examine the impact of colonialism on racial distribution.

[80m]

Number of aspects:	3 @ 27 + 27 + 26	4 @ 20 marks each
Identifying aspect:	4 marks	4 marks
Discussion:	8 x SRPs	OR 6 x SRPs
Overall coherence:	7/6 marks graded	4 marks graded

- Select scheme according to number of aspects discussed
- Allow for up to 2 examples to a max of 2 SRPs (different examples and in different aspects)
- Allow for up to 2 labelled illustrations to a max of 2SRPs (different illustrations and in different aspects)

21. Examine the importance of language as a cultural indicator.

[80m]

Number of aspects:	3 @ 27 + 27 + 26	4 @ 20 marks each
Identifying aspect:	4 marks	4 marks
Discussion:	8 x SRPs	OR 6 x SRPs
Overall coherence:	7/6 marks graded	4 marks graded

- Select scheme according to number of aspects discussed
- Allow for up to 2 examples to a max of 2 SRPs (different examples and in different aspects)
- Allow for up to 2 labelled illustrations to a max of 2SRPs (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. The characteristics of climate can change over time and space.  
Discuss this statement with reference to examples that you have studied.

[80m]

Number of aspects:	3 @ 27 + 27 + 26	4 @ 20 marks each
Identifying aspect:	4 marks	4 marks
Discussion:	8 x SRPs	OR 6 x SRPs
Overall coherence:	7/6 marks graded	4 marks graded

- Select scheme according to number of aspects discussed
- Allow for up to 2 examples to a max of 2 SRPs (different examples and in different aspects)
- Allow for up to 2 labelled illustrations to a max of 2SRPs (different illustrations and in different aspects)
- A ratio of 1:2 or 2:1 or 2:2 or 1:3 or 3:1 is required

23. Examine the impact of rainfall on agriculture and on domestic water supplies.

[80m]

Number of aspects:	3 @ 27 + 27 + 26	4 @ 20 marks each
Identifying aspect:	4 marks	4 marks
Discussion:	8 x SRPs	OR 6 x SRPs
Overall coherence:	7/6 marks graded	4 marks graded

- Select scheme according to number of aspects discussed
- Allow for up to 2 examples to a max of 2 SRPs (different examples and in different aspects)
- Allow for up to 2 labelled illustrations to a max of 2SRPs (different illustrations and in different aspects)
- A ratio of 1:2 or 2:1 or 2:2 or 1:3 or 3:1 is required



24. Examine the exchange of water between the oceans and the atmosphere.

[80m]

Number of aspects:	3 @ 27 + 27 + 26	4 @ 20 marks each
Identifying aspect:	4 marks	4 marks
Discussion:	8 x SRPs	OR 6 x SRPs
Overall coherence:	7/6 marks graded	4 marks graded

- Select scheme according to number of aspects discussed
- Allow for up to 2 examples to a max of 2 SRPs (different examples and in different aspects)
- Allow for up to 2 labelled illustrations to a max of 2SRPs (different illustrations and in different aspects)

## GEOGRAPHICAL INVESTIGATION

**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.

**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 in the appropriate graph pages.
- Maximum of 4 x SRPs per chart.

## BREAKDOWN OF PRESENTATION MARKS

### General scheme:

Up to 4 x SRPs per chart / map / table / sketch etc.  
Overall coherence: 4 marks graded

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

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

### PIE CHART:

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

### RANK ORDER TABLE / TABLE:

Suitable Title:	1 SRP = 2 marks
Boxes:	1 SRP = 2 marks
Rows (across) labelled:	1 SRP = 2 marks
Columns (side) labelled:	1 SRP = 2 marks

### SKETCH/MAP:

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

- If information not relevant to results, no SRPs for it.

## **List of Geographical Investigation Topics 2012**

1. A study of one landform evident on the Irish landscape formed by geomorphic processes.
2. Study the relationship between economic activity and traffic flow in a local area.
3. Analyse the change in land-use patterns from the Central Business District (CBD) outwards in a local area over time.
4. Water pollution – A study of a local stream or river.
5. Demographic change in a local setting.
6. A survey of the distribution of economic activities past and present in a local area.

## 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 ghnáthrata a bhronnadh ar iarrthóirí nach ngnóthaíonn thar 75% d'iomlán na marcanna. Ba chóir freisin an marc bónais sin a shlánú síos.

Iomlán: 400 Gnáthrata: 10%

Bain úsáid as an ngnáthrata 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.





