



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

**Leaving Certificate 2016**

**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

*(Please refer to Appendix 1 for Topics List)*

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 (18 x 2) 36m  
Allow one SRP for diagram for each Method/Task.

Coherence - 2m graded (2/1/0) Conformity with prescribed length 2m <span style="float: right;">4m</span>
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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 <span style="float: right;">6m</span>
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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.

Q1. (i)	(a) False	2m	
	(b) True	2m	
	(c) True	2m	
	(d) False	2m	
Q.1 (ii)	Oblique	2m	Total 10m
Q.2 (i)	108 km <sup>2</sup>	5m	
Q.2 (ii)	4.4 km	5m	Total 10m
Q.3 (i)	Parking	2m	
	18 hole Golf Course	2m	
	Waymarked Walk/Trailhead	2m	
	Fulacht Fia/River/Stream	2m	
Q.3 (ii)	Correct symbol	2m	Total 10m
Q.4 (i)	C	2m	
	A	2m	
	D	2m	
	B	2m	
Q.4 (ii)	Dormant	2m	Total 10m
Q.5	<b>Waterfall</b>	<b>Erosion</b>	2m + 2m
	Erratic	<b>Deposition</b>	2m
	<b>Sea Arch</b>	Erosion	2m
	Tombolo	<b>Deposition</b>	2m
			Total 10m
Q.6 (i)	(a) True	2m	
	(b) False	2m	
	(c) True	2m	
	(d) True	2m	
Q.6 (ii)	Igneous rock	2m	Total 10m

Q.7 (i)	C	2m	
	D	2m	
	B	2m	
	A	2m	
Q.7 (ii)	True	2m	Total 10m
Q.8	E	2m	
	D	2m	
	A	2m	
	C	2m	
	B	2m	
Q.9	(i) Nepal	2m	
	(ii) 47%	2m	
	(iii) Ireland	2m	
	(iv) Tertiary	2m	
	Primary	2m	
Q.10	C	2m	
	E	2m	
	B	2m	
	A	2m	
	F	2m	
Q.11	(i) 17.1 (°C)	2m	
	(ii) 7	2m	
	(iii) 11.0 (°C)/10.98(°C)	2m	
	(iv) Feb	2m	
	(v) 167 (mm)	2m	
Q.12	B	2m	
	D	2m	
	E	2m	
	C	2m	
	A	2m	

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

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

- **TWO** questions from **Section 1 – Core**:
  - **One** question from Questions 1, 2 and 3 (**100 marks**)
- AND**
- **One** question from Questions 4, 5 and 6 (**100 marks**)
- **ONE** question from **Section 2 – Electives (100 marks)**

***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

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

- (i) What is the name given to the area marked **A** where a large number of earthquakes and volcanic eruptions occur?

**Pacific Ring of Fire** **3m**

- (ii) Name **X**, the plate on which Ireland lies.

**Eurasian plate** **3m**

- (iii) Explain briefly what is meant by the term *plate*.

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

- (iv) Are the plates colliding or separating at **Y**?

**Colliding** **3m**

- (v) Name the ocean ridge running north from **B** along the plate boundary.

**Mid-Atlantic Ridge / North Atlantic Ridge** **3m**

- (vi) Explain briefly how this ocean ridge was formed.

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

- (vii) Name **two** other landforms resulting from plates moving.

**2 landforms named @ 3m each** **6m**

**Total 30m**

**B. Landform Development**                      **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**

**C. Human Interaction with Surface Processes**

Describe and explain how humans attempt to control **either** river processes **or** coastal processes **or** mass movement processes.

<b>Control named</b>	<b>3m</b>
<b>Description / explanation 9 SRP's @ 3m each</b>	<b>27m</b>

**Allow a second control named for one SRP. All further controls must be examined for SRP's.**

**At least one SRP for explanation.**

**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 points can be accepted.**

**Total 30m**

## Question 2

### A. 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:

- Westport Bay
- The Owenwee River
- **Two** named lakes
- An area of Coniferous Plantation.

#### 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**

**B. Rocks**

- (i) Name **one** example of an igneous rock **and** name an Irish location where it can be found.

<b>Igneous rock named</b>	<b>3m</b>
<b>Irish location named</b>	<b>2m</b>
	<b>Sub-total 5m</b>

- (ii) Describe how igneous rocks are formed.

<b>Formation described 5 SRP's @ 3m each</b>	<b>15m</b>
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**Allow one SRP for relevant annotated diagram.  
Relevant information, additional to the text, given on the diagrams can be awarded SRP's.**

**Sub-total 15m**

- (iii) Name **one** example of a metamorphic rock **and** name an Irish location where it can be found.

<b>Metamorphic rock named</b>	<b>3m</b>
<b>Irish location named</b>	<b>2m</b>
	<b>Sub-total 5m</b>

- (iv) Describe how metamorphic rocks are formed.

<b>Formation described 5 SRP's @ 3m each</b>	<b>15m</b>
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**Allow one SRP for relevant annotated diagram.  
Relevant information, additional to the text, given on the diagrams can be awarded SRP's.**

**Sub-total 15m**

**Total 40m**

**C. Weathering**

(i) In your answer book, match each of the photographs **A** and **B** with the weathering process most associated with it from the list below:

- Carbonation
- Freeze-thaw action.

<b>Carbonation</b>	<b>B</b>	<b>3m</b>
<b>Freeze-thaw action</b>	<b>A</b>	<b>3m</b>
		<b>Sub-total 6m</b>

(ii) With the aid of a diagram(s), explain how rocks are weathered by freeze-thaw action.

<b>Explanation 6 SRP's @ 3m each</b>	<b>18m</b>
<b>Diagram(s) 2 SRP's @ 3m each</b>	<b>6m</b>

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

**Sub-total 24m**

**Total 30m**

### Question 3

#### A. Earthquakes

Read the newspaper extract above and answer each of the following questions.

(i) What was the magnitude of the earthquake in Nepal?

**7.9** **3m**

(ii) At what depth (in kilometres) did the earthquake occur?

**15 (km)** **3m**

(iii) State what is meant by the term *aftershock*.

**Any valid statement** **3m**

(iv) List **three** effects of earthquakes referred to in the newspaper extract above.

**Any three effects @ 3m each** **9m**

(v) State **two** ways that the effects of earthquakes could be reduced.

**Two ways stated @ 3m each** **6m**

(vi) Explain briefly the term *epicentre*.

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

**Total 30m**

#### B. Human Interaction with the Rock Cycle

Explain how humans interact with the rock cycle with reference to **one** of the following:

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

**Explanation 10 SRP's @ 3m each** **30m**

**Allow one SRP for named example.**

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

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

**Total 30m**



### C. Karst Landscape

Examine the photographs of karst landscape features above and answer each of the following questions.

- (i) Name **one** surface karst feature evident in photograph **A** and explain, with the aid of a diagram, how this surface feature was formed.

<b>Karst feature 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 named example.**

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

**Sub-total 20m**

- (ii) Name **one** underground karst feature evident in photograph **B** and explain, with the aid of a diagram, how this underground feature was formed.

<b>Karst feature 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 named example.**

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

**Sub-total 20m**

**Total 40m**

## REGIONAL GEOGRAPHY

### Questions 4 to 6

Attempt **ONE** question

#### Question 4

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

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

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

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

##### Sketch Map

Outline of Region

6m graded (6/4/2/0)

Town/City 1

Named 2m

Shown 4m graded (4/2/0)

Town/City 2

Named 2m

Shown 4m graded (4/2/0)

Named River

Named 2m

Shown 4m graded (4/2/0)

Relief Upland/Lowland

Named 2m

Shown 4m graded (4/2/0)

**Total 30m**

## **B. Agriculture in Ireland**

(i) Name **two** types of farming in Ireland.

**Two types of farming named @ 2m each** **4m**  
**Sub-total 4m**

(ii) Explain how any **two** of the following factors influence the development of agriculture in an **Irish** region that you have studied:

- Relief and soils
- Markets
- Climate.

**Explanation Factor 1 6 SRP's @ 3m each** **18m**

**Explanation Factor 2 6 SRP's @ 3m each** **18m**

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

**Sub-total 36m**

**Total 40m**

## **C. 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 region that you have studied.

**Description / Explanation 10 SRP's @ 3m each** **30m**

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

**At least one SRP for explanation.**

**Total 30m**

## Question 5

### A. European Union

Examine the map above showing the Eurozone area in 2015 and answer each of the following questions.

- (i) In what year did Ireland join the Eurozone area **and** how many countries including Ireland joined that year?

**1999** **3m**

**11 countries** **3m**

- (ii) Name **two** European Union (EU) member states not in the Eurozone area in 2015.

**Two EU member states named @ 3m each** **6m**

- (iii) Calculate the total number of European Union member states in the Eurozone area in 2015.

**19** **6m**

- (iv) Explain briefly **two** advantages of being part of the Eurozone area.

**Advantage 1 explained 2 SRP's @ 3m each** **6m**

**Advantage 2 explained 2 SRP's @ 3m each** **6m**

**Total 30m**

### B. Economic Activity in an Irish Region

Explain any **two** of the following with reference to an **Irish** region that you have studied:

- The role of tourism in the economy of this region
- The reasons for the development of industry in this region
- The problems facing agriculture in this region.

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

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

**Naming the region** **1m**

**Total 40m**

### C. Urban Growth

Explain the reasons for the growth of any urban area that you have studied.

**Explanation 10 SRP's @ 3m each** **30m**

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

**Total 30m**

## Question 6

### A. Tourism in Ireland

Examine the chart above showing information regarding popular Irish tourist attractions in 2013 and answer each of the following questions.

- (i) Name the **two** most popular Irish tourist attractions in 2013.

**Guinness Storehouse** **3m**

**Dublin Zoo** **3m**

- (ii) Name the tourist attraction with the least number of visitors **and** state how many visitors it received.

**Fota Wildlife Park** **3m**

**365,396** **3m**

- (iii) Calculate the difference between the number of tourists that visited the National Botanic Gardens and the number of visitors that visited Tayto Park in 2013.

**115,000** **6m**

- (iv) Explain briefly **one** positive effect of tourism on Ireland.

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

- (v) Explain briefly **one** negative effect of tourism on Ireland.

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

**Total 30m**

### B. Manufacturing in a Continental / Sub-Continental Region

Describe and explain the development of manufacturing in a **Continental / Sub-Continental** region (**not in Europe**) that you have studied.

**Description / Explanation 10 SRP's @ 3m each** **30m**

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

**At least one SRP for explanation.**

**Total 30m**

### C. Primary Economic Activity in a European Region

Answer each of the following questions with reference to a **European** region (**not in Ireland**) that you have studied.

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

**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 named region for one SRP.**

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

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

**Total 40m**

**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. Aerial Photograph

Examine the aerial photograph of Westport 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 bridge
- **Two** connecting streets
- A car park in the foreground
- An industrial area in the left middle ground
- An area of waste ground in the background.

##### Sketch Outline:

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

##### Five items shown and named 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**



**B. Environmental Impact - Fossil Fuels**

- (i) Name **two** examples of fossil fuels.

**Two examples named @ 3m each** **6m**

- (ii) Describe and explain the impact of burning fossil fuels on the environment.

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

**At least one SRP for explanation.**

**Total 30m**

**C. Multinational Company (MNC)**

- (i) Name **one** multinational company located in Ireland that you have studied **and** name **one** product that it manufactures.

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

**Product named** **2m**

**Sub-total 4m**

- (ii) State where this multinational company is located in Ireland **and** explain why it set up at this location.

**Location** **3m**

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

**Sub-total 24m**

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

**Explanation 4 SRP's @ 3m each** **12m**

**Sub-total 12m**

**Total 40m**

## Question 8

### A. Economic Development

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

- (i) Name **two** countries with a high Human Development Index.

**Two countries named @ 3m each** **6m**

- (ii) Which continent has the greatest number of countries with a low Human Development Index **and** state **one** reason for this.

**Africa** **3m**

**Reason stated** **3m**

- (iii) Name any **two** factors used to calculate the Human Development Index.

**Two factors named @ 3m each** **6m**

- (iv) Explain briefly **one** reason why the Human Development Index for some countries is higher than others.

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

- (v) Explain briefly **one** way that Human Development Index information is used.

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

**Total 30m**

### B. Developed Economy

- (i) Name one developed economy where tourism or financial services contribute to that economy.

**Developed economy named** **4m**

- (ii) Explain the reasons for the growth of tourism **or** financial services in the developed economy named in part (i) above.

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

- (iii) Explain **one** benefit that tourism **or** financial services bring to the economy of developed countries.

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

- (iv) Explain **one** problem caused by tourism **or** financial services.

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

**Total 40m**

**C. Economic Activity and Conflict**

- (i) Name **one** example of how the development of economic activities and the exploitation of natural resources can lead to conflict arising between people.

**Example named** **3m**

- (ii) Describe and explain this conflict.

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

**At least one SRP for explanation.**

**Total 30m**

## Question 9

### A. Energy Consumption

Examine the table above showing estimated global energy consumption by 2030 and answer each of the following questions.

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

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

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

<b>2 SRP's @ 3m each</b>	<b>6m</b>	
		<b>Sub-total 6m</b>
		<b>Total 30m</b>

### B. European Union Policy

Explain how European Union policies have impacted on the Irish economy.

<b>Explanation 9 SRP's @ 3m each</b>	<b>27m</b>
<b>Impact identified 1 SRP</b>	<b>3m</b>

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

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

**Total 30m**

**C. 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 large hotel within the area covered by the map.

- (i) State, using a six-figure grid reference, where you would locate the hotel.

**Six-figure grid reference**

**7m graded (7/4/0)**

- (ii) Explain the reasons why you chose this location.

**Reasons explained 8 SRP's @ 3m each**

**24m**

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

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

**9m**

**Total 40m**

## PATTERNS AND PROCESSES IN THE HUMAN ENVIRONMENT

### Questions 10 to 12

#### Question 10

##### A. Aerial Photograph

Examine the aerial photograph of Westport 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 bridge
- **Two** churches
- **Two** connecting streets
- A large car park in the centre background.

##### Sketch:

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

## B. Migration – Rural to Urban

- (i) Explain the *push factors* associated with migration from rural to urban areas.

<b>First Push factor identified</b>	<b>3m</b>
<b>Second Push factor identified</b>	<b>2m</b>
<b>Explanation 5 SRP's @ 3m each</b>	<b>15m</b>
	<b>Sub-total 20m</b>

- (ii) Explain the *pull factors* associated with migration from rural to urban areas.

<b>First Pull factor identified</b>	<b>3m</b>
<b>Second Pull factor identified</b>	<b>2m</b>
<b>Explanation 5 SRP's @ 3m each</b>	<b>15m</b>
	<b>Sub-total 20m</b>

**Total 40m**

## C. Urban Functions

- (i) Name **one** urban area that you have studied **and** name any **two** functions of this urban area.

<b>Urban area named</b>	<b>3m</b>
<b>Two functions named 2 SRP's @ 3m each</b>	<b>6m</b>
	<b>Sub-total 9m</b>

- (ii) Describe and explain how the functions of this urban area have changed over time.

<b>Reference to change stated 1 SRP @ 3m</b>	<b>3m</b>
<b>Description / explanation 6SRP's @ 3m each</b>	<b>18m</b>

**At least one SRP for explanation.**

**Sub-total 21m**

**Total 30m**

## Question 11

### A. Irish Emigration

Examine the table above showing information regarding emigration from Ireland by nationality in 2015 and answer each of the following questions.

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

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

- (ii) In your answer book, explain briefly **one** reason why people are emigrating from Ireland.

<b>Brief explanation 2 SRP's @ 3m each</b>	<b>6m</b>
	<b>Sub-total 6m</b>

**Total 30m**

### B. Development of Urban Settlements

Examine the aerial photograph of Westport accompanying this paper.

Explain **three** reasons why the town of Westport developed at this location, using evidence from the aerial photograph to support each reason.

<b>Three reasons @ 10m each</b>	<b>30m</b>
<b>For each reason:</b>	
<b>Aerial photograph evidence</b>	<b>1m</b>
<b>Explanation 3 SRP's @ 3m each</b>	<b>9m</b>

**Aerial photograph evidence must be accepted notation (e.g. right background etc.).**

**Total 30m**



**C. Urban Growth - Developing World City**

- (i) Name **one** city in the developing world that has grown rapidly.  
**Developing world city named** **4m**
- (ii) Explain why this city has grown rapidly **and** describe the problems associated with this rapid growth.

**Reason for growth stated 1 SRP @ 3m** **3m**  
**Problem stated 1 SRP @ 3m** **3m**  
**Description / explanation 7 SRP's @ 3m each** **21m**

**At least one SRP for explanation.**

- (iii) Describe **one** solution to the problems experienced as a result of this rapid growth.  
**One solution 3 SRP's @ 3m each** **9m**

**Total 40m**

## Question 12

### A. Urban Growth

Read the article above and answer each of the following questions.

- (i) What percentage of the world's urban population is resident in the world's largest cities?  
**51%** **3m**
- (ii) Where are the world's largest cities are increasingly concentrated **and** what percentage of these cities are located in this area?  
**Asia** **3m**  
**56%** **3m**
- (iii) Name the **three** high income world cities ranked in the top ten of the world's largest cities.  
**Tokyo** **3m**  
**Seoul** **3m**  
**New York** **3m**
- (iv) Explain briefly what is meant by the term *population density*.  
**Brief explanation 2 SRP's @ 3m each** **6m**
- (v) Explain briefly **one** problem experienced in cities with high population densities.  
**Brief explanation 2 SRP's @ 3m each** **6m**

**Total 30m**

### B. Overpopulation

- (i) Explain briefly what is meant by the term *overpopulation*.  
**Brief explanation 2 SRP's @ 3m each** **6m**
- (ii) Describe and explain the causes **and** effects of overpopulation with reference to example(s) that you have studied.  
**One cause stated** **3m**  
**One effect stated** **3m**  
**One example stated** **3m**  
  
**Description/Explanation 5 SRP's @ 3m each** **15m**

**Total 30m**

### C. Rural Settlement Patterns

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

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

**Three rural settlement patterns:**

**Named**

**4m + 3m + 3m**

**Located**

**4m + 4m + 4m**

**(4m graded 4/2/0)**

**Sub-total 22m**

- (ii) Explain each of the **three** rural settlement patterns named in part (i) above.

**For each rural settlement pattern:**

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

**6m + 6m + 6m**

**Sub-total 18m**

**Total 40m**

## **Appendix 1**

### **List of Geographical Investigation Topics 2016**

1. Traffic patterns in a local area.
2. Population in a local area.
3. A local environmental issue.
4. Changing land-use in a local area.
5. Local weather patterns.
6. The impact of geomorphic process/processes and/or human activity on the development of landform(s) in a glaciated or fluvial or coastal or karst environment.

## Appendix 2



# Coimisiún na Scrúduithe Stáit

### *Marcanna Breise as ucht freagairt trí Ghaeilge*

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

N.B. Ba chóir marcanna de réir an ghnáthráta a bhronnadh ar iarrthóirí nach ghnóthaíonn níos mó ná 75% d'iomlán na marcanna don scrúdú. Ba chóir freisin an marc bónais sin a **shlánú síos**.

### Tábla 400 @ 10%

Bain úsáid as an tábla seo i gcás na n-ábhar a bhfuil 400 marc san iomlán ag gabháil leo agus inarb é 10% gnáthráta an bhónais.

Bain úsáid as an ngnáthráta i gcás 300 marc agus faoina bhun sin. Os cionn an mharc 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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