



Coimisiún na Scrúduithe Stáit
State Examinations Commission

Leaving Certificate 2023

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.

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 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.

The table below contains information about annotations used for marking throughout the exam paper. For certain questions other annotations are used, these are listed after the marking scheme for the relevant question.

Annotation	Use	Marks (if applicable)
✓ ₁	Valid information	1
✓ ₂	Valid information	2
✓ ₃	Valid information	3
✓ ₄	Valid information	4
✓	Surplus information	N/A
0	Incorrect answer	0
■■	Significant part of the answer	N/A
✗	Page seen by examiner / Information not valid	N/A

PART ONE – SHORT-ANSWER QUESTIONS – 80 MARKS

Any 10 questions @ 8 marks each.

Mark all questions attempted and award questions with highest mark.

No grading.

<p>Q.1 (i) Confluence 2m Drumlin 2m Concave slope 2m (ii) Valid lake 1+1m</p>	<p>Q.7 (i) 320 (m) 2m (ii) 2.5 (km) 2m (iii) N 510 994 2m (iv) 96 (km²) 2m</p>
<p>Q.2 (i) C 1m F 1m D 1m B 1m A 1m E 1m (ii) Valid feature 1+1m</p>	<p>Q.8 (i) North west 2m (ii) H 42 04 2m (iii) R 198 2m (iv) Oblique 2m</p>
<p>Q.3 (i) C 1m A 1m D 1m B 1m (ii) Deposition 1m Deposition 1m Erosion 1m Deposition 1m</p>	<p>Q.9 A Left Middleground 2m B Left Foreground 2m C Centre Foreground 2m D Centre Middleground 2m</p>
<p>Q.4 (i) 3 2m 1 2m 2 2m (ii) Valid sedimentary rock 1m Valid metamorphic rock 1m</p>	<p>Q10 (i) Occluded front 2m (ii) 1024(mb) 2m (iii) True 2m (iv) Prevailing 2m</p>
<p>Q.5 (i) C 1m E 1m B 1m F 1m A 1m D 1m (ii) Lithosphere 2m</p>	<p>Q11 (i) An Cheathrú Rua 2m (ii) 53 (%) 2m (iii) Rann na Feirste 2m (iv) 292 2m</p>
<p>Q.6 (i) London 1m West of Ireland 1m Cool Temperate Oceanic 1m North European Plain 1m Co. Meath 1m Sambre Meuse Valley 1m (ii) (a) True 1m (b) False 1m</p>	<p>Q12 (i) 166,752 2m (ii) Dublin 2m (iii) 361,671 2m (iv) Valid ways 1+1m</p>

In 2023 candidates had additional choice on the Leaving Certificate Geography paper. The instructions for Part Two of the higher level examination paper were:

You must attempt **FOUR** questions. This must include one question from three of the sections below:

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

The fourth question can be from any section.

In order to get a total mark for Part Two, the online marking system initially selects the four questions with the highest marks from Part Two and adds them. If three questions are from different sections then this is the correct total mark for Part Two, and the Examiner enters NR for an item called Adjust. This leaves the total that the online marking system has initially calculated as it is.

If three of the four questions with the highest marks are from the same Section, then the total of these is invalid due to the required rubric. In these instances, the Examiner enters the appropriate negative mark for the Adjust item, using the following annotations:

Annotation	Use	Marks (if applicable)
A	Indicates that marks from the question below are being adjusted from the total	N/A
0 1 2 3 4 5 6 7 8 9 10	The total of the annotations used is being subtracted from the total	0, -1, -2, -3, -4, -5, -6, -7, -8, -9, -10

Specifically, the Examiner places the A annotation in the top right of the first page on which the question with the fourth-highest mark was answered, and places the correct combination of numbers beside this A in order to apply the appropriate adjustment. For example, to apply an Adjust mark of -23, an Examiner would place A, -10, -10, -3.

The effect of the Adjust mark is to ensure that the rubric above is applied – that is, that a candidate's total mark for Part Two is the highest combination of valid marks (where the marks of not more than two questions come from the same section).

SECTION 1

PATTERNS AND PROCESSES IN THE PHYSICAL ENVIRONMENT

Questions 1 to 3

All questions carry 80 marks.

Question 1

1A. Ordnance Survey Map

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

Draw a sketch map of the area shown to half scale.

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

- The entire area of Lisnananagh Lough
- The course of the Stradone River from where it exits Lisnananagh Lough to H 505 056.
- The triangulation pillar at Fleming's Folly in the south west of the map
- The entire area of land above 300 metres.

[20m]

Sketch Outline	4 marks (4/0)
4 features @ 4 marks each	Shown 3 marks (graded 3/1/0)
	Label 1m

- Sketch outline must be drawn to half scale of the prescribed area. Required size is 12 cm x 9 cm [allow a difference of up to 0.5cm]. It must be landscape orientation.
- The sketch must have four sides drawn. Using the edge of the page is not acceptable. Lose 4 marks for sketch outline.
- 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 labelling marks only.
- If the aerial photograph is used instead of the Ordnance Survey map 0 marks.
- The features may be labelled on the sketch or in a key. If not labelled, 0 marks for showing.
- There must be an attempt to show feature for labelling marks to be awarded. If not shown, 0 marks for labelling. If located incorrectly but labelled correctly, labelling marks can be awarded as there has been an attempt to locate it.
- Showing marks graded 3/1/0. Reasonable accuracy (location and proportion) for full showing marks.
- Sketch may be drawn in the answer book or on graph paper.

1B. Igneous Rocks

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

[30m]

Two Irish igneous rocks named	2 + 2 marks
Explanation of formation of rock 1	7/6 x SRP's
Explanation of formation of rock 2	6/7 x SRP's

- Credit valid examples of Irish locations for each rock for 2 x SRP's.
- Credit relevant labelled diagram for 1 x SRP. Diagram without labelling 0 marks.
- Credit additional relevant information on labelled diagram for 2 x SRP's. This must be information not already given in the written account.
- Max 2 x SRP's if there is merely a description of igneous rocks without a reference to formation.
- Max 7 x SRP's if only one igneous rock is explained.

Annotation	Use	Marks
N	Igneous rock named	2
Ex	Valid example	2
✓₂	Valid information worth 2 marks	2
✓	Surplus SRP	N/A
Dg	Valid diagram	2
P1 / P2	Annotations relate to rock 1/rock 2	N/A

1C. Isostasy

Examine how isostasy has impacted on the Irish landscape, with reference to the fluvial landscape and/or the coastal landscape.

[30m]

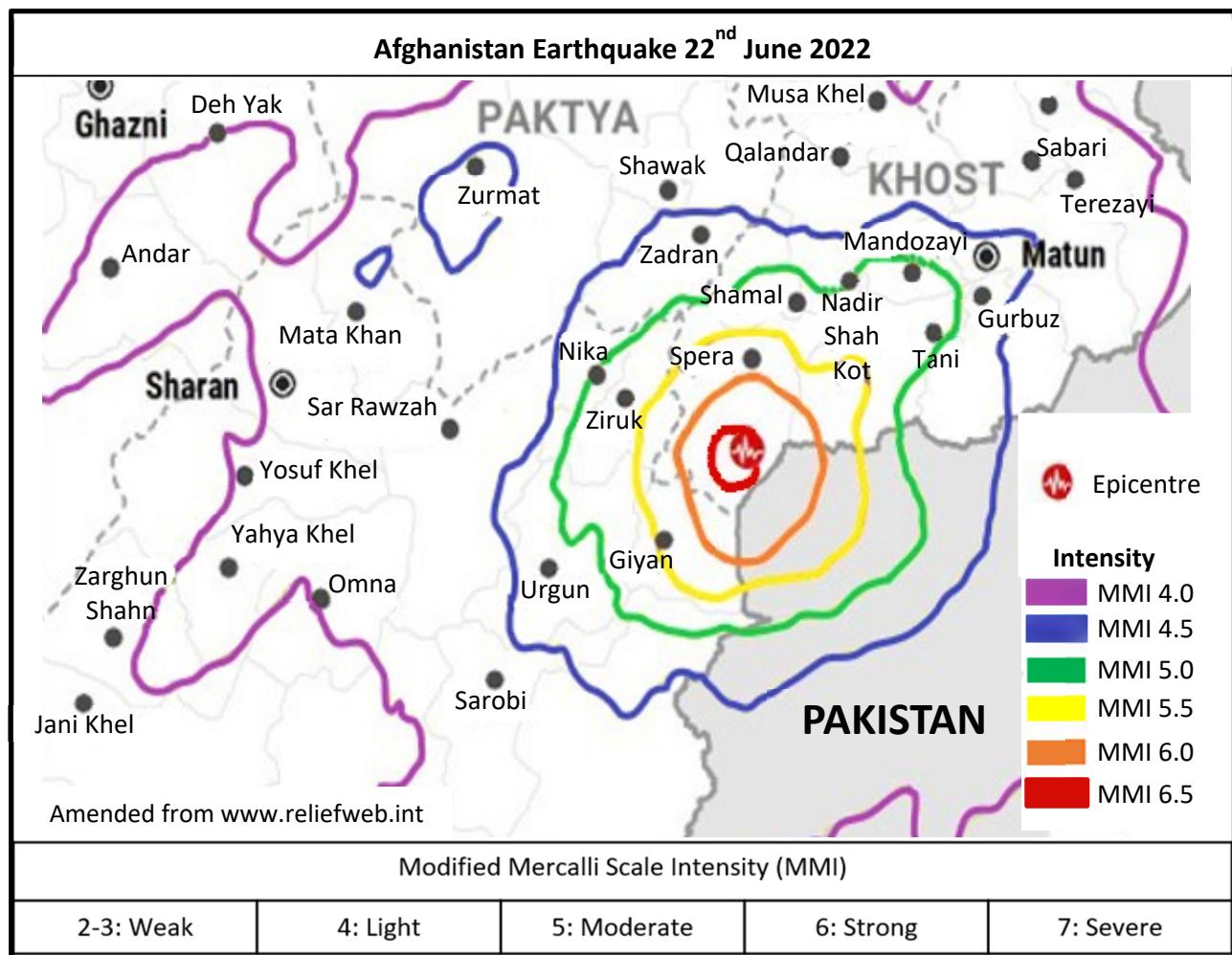
Impact / feature identified	2 marks
Examination	14 x SRPs

- Credit 2nd impact/feature identified for 1 x SRP from examination. All further impacts/features require examination.
- Credit two named Irish examples for 2 x SRP's from examination.
- Credit 1 x SRP for relevant labelled diagram. Diagram without labelling 0 marks.
- Credit additional relevant information on labelled diagram for 2 x SRP's. This must be information not already given in the written account.
- Question is tied to Ireland.
- Max 2 x SRP's if there is merely a description of isostasy without a reference to the impact on the Irish landscape.

Annotation	Use	Marks
I	Impact / feature identified	2
Ex	Example	2
✓ ₂	Valid information worth 2 marks	2
✓	Surplus SRP	N/A
Dg	Valid diagram	2

Question 2

2A. Earthquakes



Examine the map and legend above which gives information on an earthquake in Afghanistan and answer each of the following questions.

- (i) What was the Modified Mercalli Scale Intensity (MMI) at the epicentre of this earthquake?
- (ii) Name **two** settlements that experienced an MMI of 5.0 or higher.
- (iii) On Afghanistan's border with which other country did this earthquake take place?
- (iv) Other than the Modified Mercalli Scale, name **one** scale used to measure earthquakes.
- (v) Name **one** instrument used to measure earthquakes.
- (vi) Explain briefly the term *focus*, in relation to earthquakes.
- (vii) Explain briefly **one** way to reduce the effect of an earthquake.

[20m]

(i)	6.5 (MMI)	2 marks
(ii)	Valid settlement	2 + 2 marks
(iii)	Pakistan	2 marks
(iv)	Richter Scale	2 marks
(v)	Valid instrument	2 marks
(vi)	Valid explanation	2 + 2 marks
(vii)	Valid explanation	2 + 2 marks

2B. Surface Processes

Answer (i) or (ii)

(i) Examine the role of the **process of deposition** on the formation of **one** fluvial landform **or one** coastal landform **or one** glacial landform that you have studied.

[30m]

Landform named	2 marks
Examination	14 x SRP's

- Credit 2 x SRP's for reference to the role of the process of deposition. All further reference to the processes of deposition requires examination.
- Credit 1 x SRP for a specific example from examination.
- Focus of question is on the impact of the process of deposition on the formation of one landform. Examination of processes of erosion 0 marks.
- Credit relevant labelled diagram for 1 x SRP. Diagram without labelling 0 marks.
- Credit additional relevant information on labelled diagram for 2 x SRP's. This must be information not already awarded in the written account.
- Max 2 x SRP's if there is merely a description of landform without a reference to formation.
- Question is not tied to Ireland.

Annotation	Use	Marks
N	Landform named	2
REF	Reference to process of deposition	2
Ex	Example or location	2
✓2	Valid information worth 2 marks	2
✓	Surplus SRP	N/A
Dg	Valid diagram	2

Or

(ii) Describe and explain the **factors governing the operation** of **one** mass movement process that you have studied.

[30m]

Factors identified 2 + 2 marks

Mass movement process named 2 marks

Description/explanation 12 x SRP's

- All further factors require description/explanation.
- Credit 1 x SRP for a specific example from description/explanation.
- Credit relevant labelled diagram for 1 x SRP. Diagram without labelling 0 marks.
- Credit additional relevant information on labelled diagram for 2 x SRP's. This must be information not already awarded in the written account.
- Question is not tied to Ireland.
- Max 2 x SRP's if there is merely a description of mass movement without a reference to factors governing its operation.

Annotation	Use	Marks
I	Factor identified	2
N	Mass movement process named	2
Ex	Example or location	2
✓ 2	Valid information worth 2 marks	2
✓	Surplus SRP	N/A
Dg	Valid diagram	2

2C. Chemical Weathering

Explain, with the aid of labelled diagram(s), how chemical weathering has shaped **one** of the following:

- The surface karst landscape
- The underground karst landscape.

[30m]

Labelled diagram	2 marks
Explanation	14 x SRP's

- Credit 1 x SRP for process of chemical weathering identified from explanation. All further processes require explanation.
- Credit 1 x SRP for a named landform from explanation.
- Credit 1 x SRP for a specific named example from explanation.
- Diagram without labelling 0 marks.
- Credit additional relevant information on labelled diagram for 2 x SRP's. This must be information not already given in the written account.
- Max 2 x SRP's if there is merely a description of chemical weathering without a reference to shaping of the surface or underground karst landscape.
- If explanation of both surface and underground features, mark both separately and award the highest mark.
- Question is not tied to Ireland.

Annotation	Use	Marks
Dg	Valid diagram	2
I	Process of chemical weathering identified	2
N	Landform named	2
Ex	Example	2
✓2	Valid information worth 2 marks	2
✓	Surplus SRP	N/A

Question 3

3A. Mass movement

Glacier Avalanche in Italy

A mass of ice broke off the Marmolada glacier, sending an avalanche of ice, rocks and debris plummeting down the slope and onto a popular hiking trail along the Dolomite Mountains.

Known as the Queen of the Dolomites, the Marmolada is about 3,300 metres high and is the tallest peak in the eastern Dolomites. According to research by Italian scientists the Marmolada glacier has lost an estimated 80% of its volume over the last 72 years and there was a warning in 2020 that the glacier could disappear within 15 years because of global warming.



Amended from www.theguardian.com

Examine the article above which gives information on a glacier avalanche and answer each of the following questions.

- (i) In which country are the Dolomite Mountains located?
- (ii) What height (in metres) is the Marmolada mountain?
- (iii) By what estimated percentage has the volume of the glacier been reduced in the last 72 years?
- (iv) Name **one** example of a slow type of mass movement.
- (v) Explain briefly the term *regolith*.
- (vi) List **two** factors that influence the speed of mass movement.
- (vii) Explain briefly how **one** of these factors influences the speed of mass movement.

[20m]

(i)	Italy	2 marks
(ii)	3,300(m)	2 marks
(iii)	80(%)	2 marks
(iv)	Valid example	2 marks
(v)	Valid explanation	2 + 2 marks
(vi)	Valid factors	2 + 2 marks
(vii)	Valid explanation	2 + 2 marks

3B. The Tectonic Cycle

Explain how the study of plate tectonics has helped us to understand the global distribution of any **one** of the following:

- Earthquakes
- Volcanoes
- Fold mountains

[30m]

Example	2 + 2 marks
Explanation	13 x SRP's

- Credit reference to plate tectonics for 1 x SRP from explanation.
- Credit relevant labelled diagram for 1 x SRP. Diagram without labelling 0 marks.
- Credit additional relevant information on labelled diagram for 2 x SRP's. This must be information not already given in the written account.
- Max 2 x SRP's if there is no reference to how plate tectonics helps to explain the global distribution of volcanoes, earthquakes or fold mountains.

Annotation	Use	Marks
Ex	Example of global distribution	2
REF	Reference to plate tectonics	2
✓2	Valid information worth 2 marks	2
✓	Surplus SRP	N/A
Dg	Valid diagram	2

3C. Human Interaction with the Rock Cycle

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

- Mining
- Extraction of building materials
- Oil/gas exploitation
- Geothermal energy production.

[30m]

Examination 15 x SRP's

- Credit 1 x SRP for example from examination.
- Credit 1 x SRP for interaction identified from examination. All further interactions require examination.
- Credit relevant labelled diagram for 1 x SRP. Diagram without labelling 0 marks.
- Credit additional relevant information on a labelled diagram for 2 x SRP's. This must be information not already awarded in the written account.
- Question is not tied to Ireland.
- Discussion may be positive or negative.

Annotation	Use	Marks
Ex	Example	2
I	Interaction identified	2
✓ ₂	Valid information worth 2 marks	2
✓	Surplus information	N/A
Dg	Valid diagram	2

SECTION 2

REGIONAL GEOGRAPHY

Questions 4 to 6

All questions carry 80 marks.

Question 4

4A. Map Skills

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

On it, show and name each of the following:

- The outline of a named feature of relief (upland or lowland)
- A named urban centre
- The outline of a named agricultural or industrial region
- The course of a named river.

[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 an outline map of an Irish or Continental / Sub Continental region.
- Accept any valid type of urban centre irrespective of size.
- Outline map may be drawn in the answer book or on graph paper.
- Names may be written on the sketch map or in a key.
- Credit marks for naming of required features if names are valid and correct even if features are not shown or are shown incorrectly.
- Where features are shown but named incorrectly or not named at all, then 0 marks for showing and 0 marks for naming.

4B. Tertiary Economic Activity – Continental / Sub-Continental Region

Account for the development of **one** tertiary economic activity in a **Continental / Sub-Continental** region (not in Europe), that you have studied.

[30m]

Examination 15 x SRP's

- Credit 2 x SRP's for factors influencing the development of a named tertiary economic activity from examination. All further factors require examination.
- Credit 2 x SRP's for specific examples of a tertiary economic activity from examination.
- A valid labelled sketch map can receive 1 x SRP from examination and if additional relevant information on the sketch not already in the written account it can receive a further 1 x SRP.
- Accept examination of only one tertiary economic activity. If more than one tertiary economic activity examined, mark each separately and award the highest mark.
- Do not accept examination of an Irish or a European region.
- Examination without reference to named or clearly inferred region 0 marks.
- Max 2 x SRP's if merely a description of the activity without a reference to development of the activity.
- Accept a positive or negative interpretation of development.

Annotation	Use	Marks
N	Factor named	2
Ex	Example of tertiary activity	2
✓2	Valid information worth 2 marks	2
✓	Surplus information	N/A
Dg	Valid diagram	2

4C. Urban Development

Examine how **two** of the following factors have influenced the development of any urban area that you have studied:

- Transport
- Location
- Primary economic activity.

[30m]

Urban area named	2 marks
Influence on development identified	2 marks
Examination of factor 1	7/6 x SRP's
Examination of factor 2	6/7 x SRP's

- Credit a second influence on development identified for 1 x SRP from examination. All further factors require examination.
- Accept any valid type of urban area or part thereof irrespective of size.
- Examination without reference to a named or clearly inferred urban area 0 marks.
- Credit a valid labelled sketch map for 1 x SRP from discussion.
- Credit additional relevant information on the sketch map for a further 1 x SRP. This must be information not already awarded in the written account.
- Examination can be based on positive or negative interpretation of development.

Annotation	Use	Marks
N	Urban area named	2
I	Influence on development identified	2
✓2	Valid information worth 2 marks	2
✓	Surplus SRP	N/A
Dg	Valid diagram	2
P1 / P2	Annotations relate to factor 1/factor 2	N/A

Question 5

5A. European Air Transport

Goods transported by air (in thousands of tonnes)

	2015	2018	2021
Belgium	1,126	1,416	2,083
Denmark	210	242	246
France	2,380	2,407	2,275
Germany	4,325	4,773	5,273
Ireland	148	156	155
Netherlands	1,712	1,840	1,807
Portugal	133	173	174
Switzerland	401	493	341
EU 27	12,524	14,243	15,023

Amended from Eurostat

Examine the table above showing the goods transported by air in Europe in selected years and answer each of the following questions.

- (i) Which country transported 242,000 tonnes of goods by air in 2018?
- (ii) Which country had the lowest amount of goods transported by air in 2015?
- (iii) Name **one** country that had a decline in goods transported by air between 2015 and 2021.
- (iv) Calculate the percentage of EU 27 goods transported by air in 2018 that were accounted for by Germany.
- (v) Which country from the table above is not a member of the EU?
- (vi) Explain briefly **one** advantage of transporting goods by air.
- (vii) Explain briefly **one** environmental challenge caused by air transport.

[20m]

(i)	Denmark	2 marks
(ii)	Portugal	2 marks
(iii)	France/Switzerland	2 marks
(iv)	33.5 (%)	4 marks
(v)	Switzerland	2 marks
(vi)	Valid explanation	2 + 2 marks
(vii)	Valid explanation	2 + 2 marks

5B. Primary Economic Activity

Explain any **two** factors that have influenced the development of **one** primary economic activity in an **Irish** region that you have studied.

[30m]

Factors identified	2 + 2 marks
Explanation of Factor 1	7/6 x SRP's
Explanation of Factor 2	6/7 x SRP's

- Credit 2 x SRP's for specific examples of primary economic activity from explanation.
- Do not accept examination of primary activity in a European or Continental/Sub Continental region.
- Explanation without link to a named or clearly inferred region 0 marks.
- Max 1 x SRP per factor if there is merely a description of the factor without a reference to the development of primary activity.
- Credit a valid labelled sketch map for 1 x SRP from examination.
- Credit additional relevant information on the sketch map for a further 1 x SRP. This must be information not already awarded in the written account.
- Positive and negative interpretation of development is acceptable.

Annotation	Use	Marks
I	Factor identified	2
Ex	Example of primary economic activity	2
✓2	Valid information worth 2 marks	2
✓	Surplus SRP	N/A
Dg	Valid diagram	2
P1 / P2	Annotations relate to factor 1 /factor 2	N/A

5C. The European Union

Discuss the potential challenges facing the future development of the European Union with reference to factors such as political union, economic union and sovereignty.

[30m]

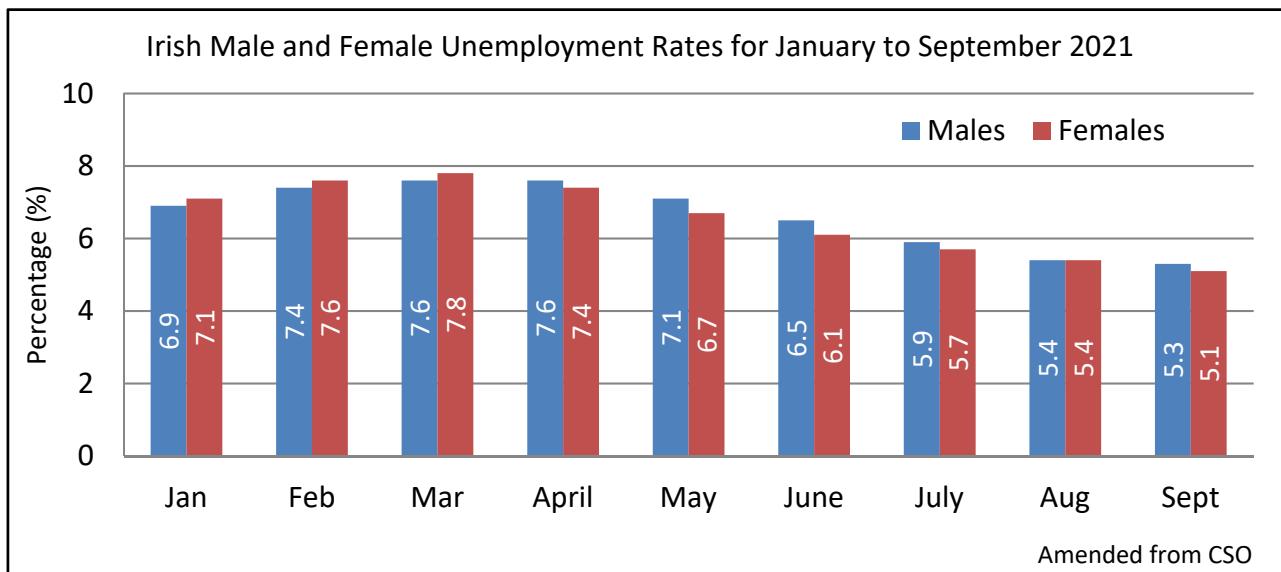
Potential challenges identified	2 + 2 marks
Discussion	13 x SRP's

- Credit a third challenge identified for 1 x SRP from discussion. All further challenges must be discussed.
- Max 2 x SRP's if there is no reference to the future development of European Union.
- Credit a valid labelled sketch map for 1 x SRP from discussion.
- Credit additional relevant information on the sketch map for a further 1 x SRP. This must be information not already awarded in the written account.
- Information awarded on a sketch map if presented must be valid and relevant to the set question.
- Discussion may be positive or negative.

Annotation	Use	Marks
1	Challenge identified	2
✓2	Valid information worth 2 marks	2
✓	Surplus SRP	N/A
Dg	Valid diagram	2

Question 6

6A. Irish Unemployment



Examine the clustered bar chart above showing the male and female unemployment rates in Ireland from January 2021 to September 2021 and answer each of the following questions.

- (i) What was the female unemployment rate (%) for March 2021?
- (ii) In which month were the male and female unemployment rates the same?
- (iii) For how many months was the female unemployment rate higher than the male unemployment rate?
- (iv) Was the unemployment rate for males increasing **or** decreasing from May to September?
- (v) Calculate the average unemployment rate (%) for females for the months shown on the chart above.
- (vi) Explain briefly **two** benefits of having a low unemployment rate.

[20m]

(i)	7.8 (%)	2 marks
(ii)	August	2 marks
(iii)	Three	2 marks
(iv)	Decreasing	2 marks
(v)	6.5 (%)	4 marks
(vi)	Valid explanation	2 + 2 marks
		2 + 2 marks

6B. Secondary Economic Activity

Account for the development of secondary economic activity in a **European** region (not in Ireland) that you have studied, with reference to any **two** of the following factors:

- Labour
- Transport
- Raw materials
- Markets.

[30m]

Examination of Factor 1	8/7 x SRP's
Examination of Factor 2	7/8 x SRP's

- Credit 2 x SRP's for specific examples of secondary economic activity from examination.
- Do not accept an Irish or Continental/Sub-Continental region.
- Examination without link to a named or clearly inferred region 0 marks.
- Max 2 x SRP's per factor if there is merely a description of the factor without a reference to development of secondary economic activity.
- Credit a valid labelled sketch map for 1 x SRP from examination.
- Credit additional relevant information on the sketch map for a further 1 x SRP. This must be information not already awarded in the written account.
- Positive or negative interpretation is acceptable.

Annotation	Use	Marks
Ex	Example of secondary economic activity	2
✓ ₂	Valid information worth 2 marks	2
✓	Surplus information	N/A
Dg	Valid diagram	2
P1 / P2	Annotations relate to factor 1 /factor 2	N/A

6C. Population in Ireland

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

[30m]

Examination 15 x SRP's

- Credit factors influencing the distribution of population for 2 x SRP's from examination. All further factors require examination.
- Credit 1 x SRP for a named location from within the region from examination.
- Do not accept a European or a Continental Sub / Continental region.
- Examination without reference to a named or clearly inferred region 0 marks.
- Max 2 x SRP's if there is merely a description of population distribution without an explanation.
- Credit a valid labelled sketch map for 1 x SRP from examination.
- Credit additional relevant information on the sketch map for a further 1 x SRP. This must be information not already awarded in the written account.
- If only one part of a region examined, max 8 x SRP's (question refers to throughout a region).

Annotation	Use	Marks
N	Factor named	2
Ex	Named location	2
✓2	Valid information worth 2 marks	2
✓	Surplus information	N/A
Dg	Valid diagram	2

SECTION 3

ELECTIVES

Questions 7 to 12

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

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

All questions carry 80 marks.

PATTERNS AND PROCESSES IN ECONOMIC ACTIVITIES

Questions 7 to 9

Question 7

7A. 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:

- The lake
- **Two** connecting streets
- An area of waste ground in the centre foreground.
- Industrial buildings in the left background

[20m]

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

- Sketch outline must be drawn half the length and half the breadth. The measurements required are 12.7 cm by 8.4 cm (allow 0.5 cm difference on each side). It must be of landscape orientation.
- The sketch must have four sides drawn. Using edge of the page not acceptable. Lose 4 marks for sketch outline.
- If sketch is traced or only a section of the aerial photograph is drawn, lose 4 marks for sketch outline and lose 3 marks for showing per item. Allow labelling marks only.
- If Ordnance Survey map is used instead of aerial photograph 0 marks.
- The features must be labelled on the sketch or in a key. If not labelled, 0 marks for showing.
- There must be an attempt to show feature for labelling marks to be awarded. If not shown, 0 marks for labelling. If located incorrectly but labelled correctly, labelling marks can be awarded as there has been an attempt to locate it.
- Showing marks graded 3/1/0. Reasonable accuracy (location and proportion) for full showing marks.
- Sketch may be drawn in the answer book or on graph paper.

7B. Mobility of Economic Activities

Examine the mobility of modern economic activities with reference to **one** multinational company that you have studied.

[30m]

MNC named	2 marks
Examination	14 x SRP's

- Credit 2 x SRP's for two named locations.
- Examination without link to named multinational company 0 marks.
- Max 2 x SRP's if there is merely a description of multinational company without an examination of the mobility of modern economic activities.
- Multinational company need not be Irish based.

Annotation	Use	Marks
N	MNC named	2
Ex	Named location	2
✓2	Valid information worth 2 marks	2
✓	Surplus information	N/A
Dg	Valid diagram	2

7C. Environmental Impact

Examine how economic activities can have an environmental impact with reference to examples on a local scale and a global scale.

[30m]

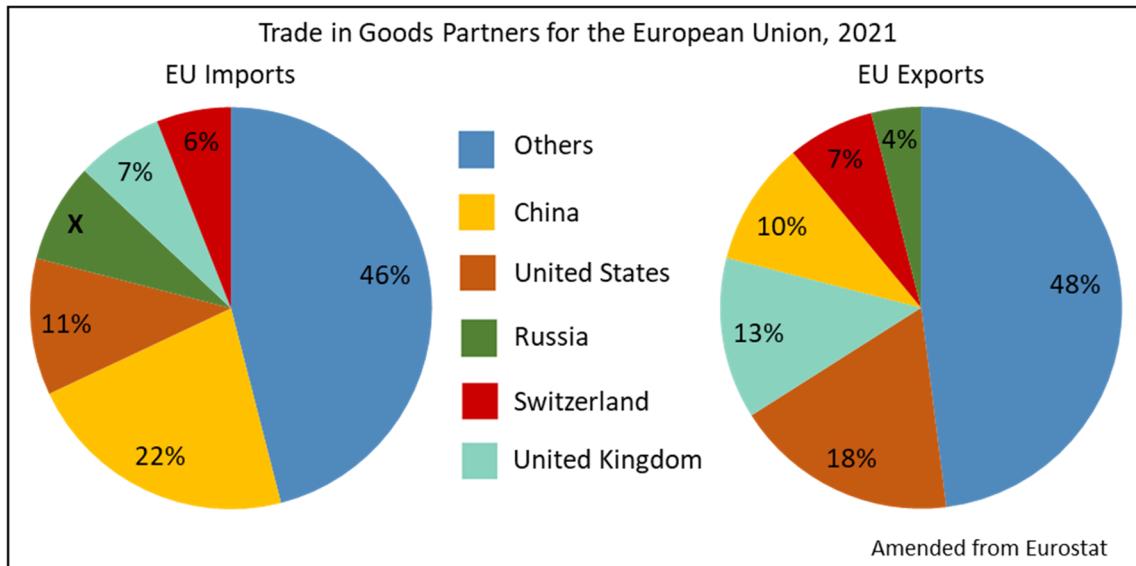
Environmental impact identified	2 marks
Examples	2 + 2 marks
Examination	12 x SRP's

- Credit 2nd environmental impact identified for 1 x SRP. All further impacts require examination.
- Max 7 x SRP's if there is an examination of local environmental impact only.
- Max 7 x SRP's if there is an examination of global environmental impact only.
- Discussion of environmental impacts where there is no reference to economic activities 0 marks.
- Impacts can be positive or negative.

Annotation	Use	Marks
I	Environmental impact identified	2
Ex	Examples	2
✓2	Valid information worth 2 marks	2
✓	Surplus information	N/A
Dg	Valid diagram	2

Question 8

8A. European Union Trade



Examine the pie charts above showing European Union (EU) trade in goods partners for 2021 and answer each of the following questions.

- (i) Which country did the EU import 6% of all imported goods from?
- (ii) What percentage of EU exports went to the United States?
- (iii) What was the percentage difference in exports and imports between the EU and the United Kingdom in 2021?
- (iv) Name **one** country shown above that the EU had a trade surplus with in 2021.
- (v) Calculate **X**, the percentage of imports to the EU that came from Russia in 2021.
- (vi) Explain briefly what is meant by the term *balance of trade*.
- (vii) Explain briefly **one** way that change in EU membership has had an impact on EU trade.

[20m]

(i)	Switzerland	2 marks
(ii)	18 (%)	2 marks
(iii)	6 (%)	2 marks
(iv)	USA/Switzerland/UK	2 marks
(v)	8 (%)	4 marks
(vi)	Valid explanation	2 + 2 marks
(vii)	Valid explanation	2 + 2 marks

8B. Economic development – 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 SRP's

- Credit 2 x SRP's for examples of the activity from examination.
- Max 2 x SRP's for examination without reference to a named developed economy.
- Examination of a developing economy 0 marks.
- If more than one developed economy examined, mark each separately and award the highest mark.
- Max 2 x SRP's if there is merely a description of the activity with no reference to the development of the activity.

Annotation	Use	Marks
N	Developed economy named	2
Ex	Example of the activity	2
✓ ₂	Valid information worth 2 marks	2
✓	Surplus SRP	N/A

8C. 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]

Three factors @ 10 marks each

For each factor:

Factor named	2 marks
OS map evidence	2 marks
Explanation	3 x SRP's

- Accept a max of two reasons on different modes of transport.
- Accept any forms of transport (road, rail, river etc.).
- If answer is based on the Aerial Photograph allow marks for naming factors only.
- Accept a positive or negative approach to how factors can influence the development of economic activity in the area shown on the map.

Annotation	Use	Marks
N	Factor named	2
Loc	OS map evidence	2
✓ 2	Valid information worth 2 marks	2
✓	Surplus SRP	N/A
P1 / P2 / P3	Annotations relate to factor 1/factor 2/factor 3	N/A

Question 9

9A. Economic Development

Average total years of schooling for adult population for selected countries in 2017

Country	Years
Argentina	10
Burundi	3
Germany	14
Indonesia	8
Ireland	13
Niger	2

Amended from ourworldindata.org

Examine the data above showing the average total years of schooling for the adult population for selected countries in 2017 and answer each of the following questions.

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

[16m]

	Bar Chart	Pie Chart
Title	2 marks	2 marks
Vertical axis named	1 mark	1 + 1 mark (Circle & Centred)
Horizontal axis named	1 mark	
6 items illustrated	2 marks each graded (2/1/0)	2 marks each graded (2/1/0)

- Accept any suitable graph/chart
- Naming of graph/chart type not sufficient for title mark. The title must have reference to chart content and can be written anywhere on the graph.
- If graph paper is not used deduct 2 marks from total.
- Apply the 2 marks graded if the numbered spaces and the column widths are not plotted accurately.

Annotation	Use	Marks
#	Graph paper not used	- 2

(ii) Explain briefly **one** disadvantage of using the Human Development Index as a measure of economic development.

[4m]

Valid explanation

2 + 2 marks

9B. Colonialism

Examine the impact of colonialism on a developing economy that you have studied

[30m]

Impact identified	2 marks
Developing economy named	2 marks
Examination	13 x SRP's

- Credit 1 x SRP for a 2nd impact of colonialism. All further impacts require examination.
- Max 2 x SRPs for examination without reference to named developing economy.
- Max 2 x SRP's if there is merely a description of colonialism without a reference to the impacts faced by the developing economy as a result of colonialism.
- Max 2 x SRP's if there is merely a description of the developing economy without a reference to impacts faced as a result of colonialism.

Annotation	Use	Marks
I	Impact identified	2
N	Developing economy named	2
✓2	Valid information worth 2 marks	2
✓	Surplus SRP	N/A

9C. Renewable Energy

Examine how the development of renewable energy is crucial for Ireland's environment and economy.

[30m]

Importance for Ireland's environment identified	2 marks
Importance for Ireland's economy identified	2 marks
Examination	13 x SRP's

- Credit 1 x SRP for example of renewable energy.
- Max 7 x SRP's if there is an examination of Ireland's environment without a reference to Ireland's economy.
- Max 7 x SRP's if there is an examination of Ireland's economy without a reference to Ireland's environment.
- Max 2 x SRP's if only a description of renewable energy without a reference to Ireland's environment or Ireland's economy.

Annotation	Use	Marks
I	Importance for environment identified	2
N	Importance for economy identified	2
Ex	Example of renewable energy	2
✓2	Valid information worth 2 marks	2
✓	Surplus SRP	N/A

PATTERNS AND PROCESSES IN THE HUMAN ENVIRONMENT

Questions 10 to 12

Question 10

10A. Aerial Photograph

Examine the aerial photograph of Cavan 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:

- The lake
- An ecclesiastical land-use
- A carpark
- A residential land-use in the background.

[20m]

Sketch Outline

4 marks (4/0)

4 features @ 4 marks each

Shown 3 marks (graded 3/1/0)

Named 1 mark

- Sketch outline must be drawn half the length and half the breadth. The measurements required are 12.7 cm by 8.4 cm (allow 0.5 cm difference on each side). It must be of landscape orientation.
- The sketch must have four sides drawn. Using edge of the page not acceptable. Lose 4 marks for sketch outline.
- If sketch is traced or only a section of the aerial photograph is drawn, lose 4 marks for sketch outline and lose 3 marks for showing per item. Allow labelling marks only.
- If Ordnance Survey map is used instead of aerial photograph 0 marks.
- The features must be labelled on the sketch or in a key. If not labelled, 0 marks for showing.
- There must be an attempt to show feature for labelling marks to be awarded. If not shown, 0 marks for labelling. If located incorrectly but labelled correctly, labelling marks can be awarded as there has been an attempt to locate it.
- Showing marks graded 3/1/0. Reasonable accuracy (location and proportion) for full showing marks.
- Sketch may be drawn in the answer book or on graph paper.

10B. Urban Issues

Discuss any **two** of the following issues that may arise from the growth of urban settlements:

- Urban decay and absence of community
- Urban sprawl
- Environmental issues.

[30m]

Discussion of issue one 8/7 x SRP's
Discussion of issue two 7/8 x SRP's

- Credit 1 x SRP for an example of an urban settlement.
- Question is not tied to Ireland.

Annotation	Use	Marks
Ex	Example of an urban settlement	2
✓ 2	Valid information worth 2 marks	2
✓	Surplus information	N/A
P1 / P2	Annotations relate to discussion of issue 1/ discussion of issue 2	N/A

10C. Migration

Describe and explain changes in patterns of migration to and from Ireland since 1950.

[30m]

Change in pattern of migration to Ireland	2 marks
Change in pattern of migration from Ireland	2 marks
Description / Explanation	13 x SRP's

- Credit the identification of one further change in patterns of migration (to or from Ireland) for 1 x SRP from description/explanation. All further changes require description/explanation.
- Max 7 x SRP's if there is a description of the changes in patterns of migration to and from Ireland without an explanation.
- Max 7 x SRP's if there is a description/explanation of changes in patterns of migration to Ireland only or if there is a description/explanation of changes in patterns of migration from Ireland only.
- Answer is tied to Ireland and to timeframe specified in the question.

Annotation	Use	Marks
I	Change in pattern of migration to Ireland	2
N	Change in pattern of migration from Ireland	2
✓ ₂	Valid information worth 2 marks	2
✓	Surplus information	N/A

Question 11

11A. Asylum applications in the EU

Asylum Applications to the European Union in 2021

Country	% of all applications
Austria	6
France	19
Germany	30
Italy	8
Spain	10
Rest of EU	27

Amended from www.consilium.europa.eu

Examine the data above showing the number of asylum applications for selected EU countries in 2021 and answer each of the following questions.

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

[16m]

	Bar Chart	Pie Chart
Title	2 marks	2 marks
Vertical axis named	1 mark	1 + 1 mark (Circle & Centred)
Horizontal axis named	1 mark	
6 items illustrated	2 marks each graded (2/1/0)	2 marks each graded (2/1/0)

- Accept any suitable graph/chart
- Naming of graph/chart type not sufficient for title mark. The title must have reference to chart content and can be written anywhere on the graph.
- If graph paper is not used deduct 2 marks from total.
- Apply the 2 marks graded if the numbered spaces and the column widths are not plotted accurately.

Annotation	Use	Marks
#	Graph paper not used	- 2

(ii) Explain briefly **one** reason why people seek asylum.

[4m]

Valid explanation

2 + 2 marks

11B. Dynamics of Population

Examine the impact of any **one** of the following factors on levels of population change, with reference to example(s) that you have studied:

- The development of resources
- Income levels
- Technology.

[30m]

Impact identified	2 marks
Example of location	2 marks
Examination	13 x SRP's

- Credit 2nd impact identified for 1 x SRP from examination. All further impacts must be examined.
- Max 2 x SRP's if there is a discussion without a reference to the impact on population change.
- Positive or negative interpretation is acceptable.

Annotation	Use	Marks
I	Impact identified	2
Ex	Example of location	2
✓ ₂	Valid information worth 2 marks	2
✓	Surplus SRP	N/A

11C. Urban Land-Use

Describe and explain the land-use zones in any city that you have studied.

[30m]

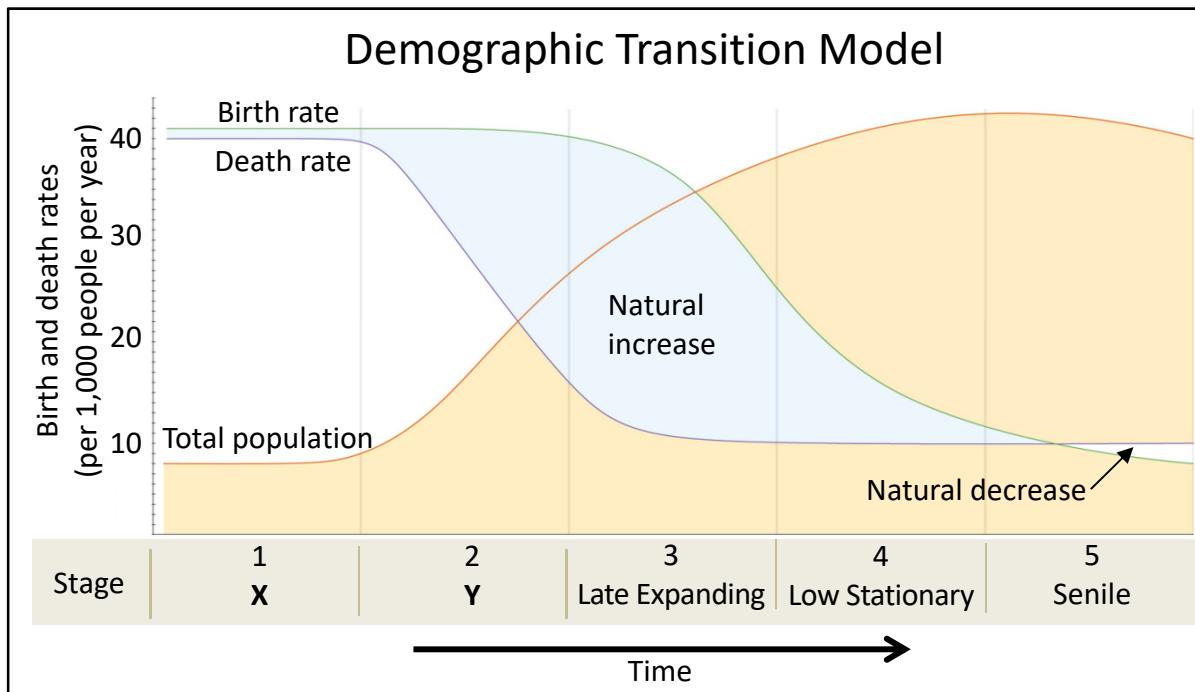
Land-use zones identified	2 + 2 marks
City named	2 marks
Description/explanation	12 x SRP's

- All further land-use zones identified require description/explanation.
- If there is a description/explanation without reference to a named or clearly inferred city, credit land-use zones identified only.
- Reference to city can be a named city or a specific part of a named city.
- Max 6 x SRP's if there is a description/explanation of one land use zone only.
- Question is not tied to Ireland.

Annotation	Use	Marks
I	Land-use zone identified	2
N	City named	2
✓2	Valid information worth 2 marks	2
✓	Surplus SRP	N/A

Question 12

12A. Population Dynamics



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

- (i) Name X, Stage 1 of the Demographic Transition Model.
- (ii) Name Y, Stage 2 of the Demographic Transition Model **and** name an example of a country in this stage.
- (iii) What stage of the Demographic Transition Model is Ireland currently in?
- (iv) In which stage of the Demographic Transition Model does the death rate reduce by the most?
- (v) State **one** reason why the birth rate starts to decrease after stage 2.
- (vi) Briefly explain **one** challenge facing countries in Stage 5 of the Demographic Transition Model.
- (vii) Briefly explain the term *natural change*.

[20m]

(i)	High Stationary	2 marks
(ii)	Early Expanding +Valid country	2 +2 marks
(iii)	Stage 4	2 marks
(iv)	Stage 2	2 marks
(v)	Valid reason stated	2 marks
(vi)	Valid explanation	2 + 2 marks
(vii)	Valid explanation	2 + 2 marks

12B. Rural settlement patterns

Using evidence from the 1:50 000 Ordnance Survey map of Cavan accompanying this paper, describe and explain **three** rural settlement patterns evident on the map.

[30m]

Three patterns @ 10 marks each

For each pattern:

Pattern named	2 marks
OS map evidence	2 marks
Description/Explanation	3 x SRP's

- Description/Explanation must be based on relevant explanation rather than on further map references.
- If answer is based on Aerial Photograph allow marks for identifying rural settlement pattern only.
- If there is no map reference or the map reference is incorrect, credit may be given for naming the pattern and valid examination.

Annotation	Use	Marks
N	Pattern named	2
Loc	OS map evidence	2
✓ ₂	Valid information worth 2 marks	2
✓	Surplus SRP	N/A
P1 / P2 / P3	Annotations relate to pattern 1/ pattern 2/ pattern 3	N/A

12C. Urban Growth – Developing World City

Problems can develop from the growth and expansion of urban centres.

Discuss this statement with reference to **one** developing world city that you have studied.

[30m]

Problems identified	2 + 2 marks
Developing world city	2 marks
Discussion	12 x SRP's

- All further problems require discussion.
- Accept any valid example of a developing world city or part thereof irrespective of size.
- Max 2 x SRP's if there is a discussion without a reference to problems.
- Max 2 x SRP's if there is a discussion without a reference to the developing world.
- Max 2 x SRP's if there is a discussion on solutions only.

Annotation	Use	Marks
I	Problem identified	2
Ex	Example of a city	2
✓2	Valid information worth 2 marks	2
✓	Surplus SRP	N/A

SECTION 4

OPTIONS

Questions 13 to 24

All questions carry 80 marks.

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 SRP's	6 x SRP's
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:

*Overall Coherence (20 marks)		
Excellent	20	Excellent ability to relate knowledge to the set question. Excellent, comprehensive response demonstrating detailed knowledge of subject matter.
Very Good	17	Considerable strength in relating the knowledge to the set question. Very good response demonstrating very broad knowledge of the subject matter.
Good	14	Reasonable capacity to relate knowledge appropriately to the set question. Good response with worthwhile information. Broad knowledge of the subject matter demonstrated.
Fair	10	Some effort to relate knowledge to the set question. Some relevant information presented but insufficient application of information to set question.
Weak	6	Very limited engagement with set question. Identified some relevant information.
Poor	0	Failure to address the question resulting in a largely irrelevant answer.

The following annotations are used in Questions 13-24

Annotation	Use	Marks
✓ ₃ / ✓ ₄	Aspect identified	3 / 4
✓ ₂	Valid information worth 2 marks	2
✓	Surplus information	N/A
Dg	Valid illustration	2
Ex	Valid example	2

The following are used when marking the Overall Coherence

EXC	Excellent	20
VG	Very Good	17
GD	Good	14
F	Fair	10
W	Weak	6
P	Poor	0

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. Empowering people is a way of linking economic growth with human development. Discuss this statement with reference to any **two** of the following:

- Aid programmes
- Land ownership patterns
- Differing gender roles in society.

[80m]

Number of aspects	3 @ 20 marks each	4 @ 15 marks each
For each aspect:		
Identifying aspect	4 marks	3 marks
Discussion	8 x SRP's	6 x SRP's
Overall Coherence	20 marks graded*	20 marks graded*

- Focus of the question is on how empowering people is a way of linking economic growth with human development.
- Select scheme according to number of aspects discussed.
- Allow for up to 3 examples to a max of 3 x SRP's from discussion (different examples and in different aspects).
- Allow for up to 2 labelled illustrations to a max of 2 x SRP's from discussion (different illustrations and in different aspects).

14. Views of development and underdevelopment involve contrasting models and approaches to development.

Discuss.

[80m]

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

- Focus of question is on the idea that there are different views of development and underdevelopment.
- Select scheme according to number of aspects discussed.
- Allow for up to 3 examples to a max of 3 x SRP's (different examples and in different aspects).
- Allow for up to 2 labelled illustrations to a max of 2 x SRP's (different illustrations and in different aspects).

15. We live in an interdependent global economy. Discuss the impact of social and political decisions with reference to each of the following:

- Economic and political refugees
- Migration patterns
- Human rights issues.

[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 on the impacts of social and political decisions on economic & political refugees, migration pattern and human rights issues.
- 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. Soil characteristics are affected by a combination of soil processes operating in their immediate environment. Examine how any **three** of the following processes impact on soil characteristics:

- Weathering
- Soil erosion
- Leaching
- Podzolisation.

[80m]

Number of aspects	3 @ 20 marks each	4 @ 15 marks each
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For each aspect:

Identifying aspect	4 marks	3 marks
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Discussion	8 x SRPs	6 x SRPs
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Overall Coherence	20 marks graded*	20 marks graded*
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- Focus of the question is on the impact of soil processes on the characteristics of soil.
- Select the scheme according to the number of aspects discussed to the benefit of the candidate.
- Allow for up to three examples for 3 x SRP's (different examples and in different aspects).
- Allow for up to two labelled illustrations to a max of 2 x SRP's (different illustrations and in different aspects).

17. Biomes are altered by human activities. Discuss.

[80m]

Number of aspects	3 @ 20marks each	4 @ 15 marks each
Identifying aspect	4 marks	3 marks
Discussion	8 x SRP's	6 x SRP's
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 SRP's (different examples and in different aspects).
- Allow for up to 2 labelled illustrations to a max of 2 x SRP's (different illustrations and in different aspects).

18. Describe and explain the general composition and characteristics of any **one** soil type.

[80m]

Number of aspects	3 @ 20 marks each	4 @ 15 marks each
For each aspect:		
Identifying aspect	4 marks	3 marks
Discussion	8 x SRP's	6 x SRP's
Overall Coherence	20 marks graded*	20 marks graded*

- Focus of the question is on the the general composition and characteristics of a soil type.
- Select scheme according to number of aspects discussed.
- Allow for up to 3 examples to a max of 3 x SRP's from discussion (different examples and in different aspects).
- Allow for up to 2 labelled illustrations to a max of 2 x SRP's from discussion (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. Many cultural groups around the world do not have a nation state of their own.
Discuss this statement with reference to example(s) you have studied.

[80m]

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

- Focus of the question is how cultural groups around the world do not have a nation state of their own.
- 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. Examine how people express their culture and identity in everyday life.

[80m]

Number of aspects	3 @ 20 marks each	4 @ 15 marks each
For each aspect:		
Identifying aspect	4 marks	3 marks
Discussion	8 x SRPs	6 x SRPs

Overall Coherence 20 marks graded* 20 marks graded*

- Focus of the question is on the ways culture and identity is expressed by people in everyday life.
- Select scheme according to number of aspects discussed.
- Allow for up to 3 examples to a max of 3 x SRP's from discussion (different examples and in different aspects).
- Allow for up to 2 labelled illustrations to a max of 2 x SRP's from discussion (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 @ 20marks each	4 @ 15 marks each
Identifying aspect	4 marks	3 marks
Discussion	8 x SRP's	6 x SRP's
Overall Coherence	20 marks graded*	20 marks graded*

- Focus of the question is on 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 SRP's from discussion (different examples and in different aspects).
- Allow for up to 2 labelled illustrations to a max of 2 x SRP's from discussion (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 how solar energy is transformed and redistributed through circulation patterns in the atmosphere and oceans.

[80m]

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

- Focus of question is on how solar energy is transformed and redistributed through circulation patterns in the atmosphere and oceans.
- Select scheme according to number of aspects discussed.
- Allow for up to 3 examples to a max of 3 x SRP's (different examples and in different aspects).
- Allow for up to 2 labelled illustrations to a max of 2 x SRP's (different illustrations and in different aspects).

23. Give an account of how atmosphere-ocean phenomena (e.g. pressure, temperature, wind and humidity) are measured and examine the importance of such measurements.

[80m]

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

- Focus of the question is on how atmosphere-ocean phenomena are measured and how important those measurements are.
- Select scheme according to number of aspects discussed.
- Allow for up to 3 examples to a max of 3 x SRP's from discussion (different examples and in different aspects).
- Allow for up to 2 labelled illustrations to a max of 2 x SRP's from discussion (different illustrations and in different aspects).

24. Examine how climate characteristics influence economic development.

[80m]

Number of aspects	3 @ 20 marks each	4 @ 15 marks each
For each aspect:		
Identifying aspect	4 marks	3 marks
Discussion	8 x SRP's	6 x SRP's
Overall Coherence	20 marks graded*	20 marks graded*

- Focus of the question is on the influence 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 SRP's from discussion (different examples and in different aspects).
- Allow for up to 2 labelled illustrations to a max of 2 x SRP's from discussion (different illustrations and in different aspects).

Geographical Investigation

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

Excessive GI material:

Where excessive material is added to a section of the GI (extra lines on the page, writing in the margins, sub-dividing existing lines etc.) allow the material for SRP's where relevant but award 0 marks for OC in that section.

The table below contains information about annotations used for marking the Geographical Investigation.

Annotation	Use	Marks (if applicable)
✓ ₁	Valid information or Mark awarded for C/L	1
✓ ₂	Valid information or Mark awarded for C/L or OC	2
✓ ₄	Mark awarded for C/L or OC	4
✓ ₆	Mark awarded for C/L or OC	6
✓	Surplus information	N/A
0	Incorrect answer	0
Dg	Valid diagram / sketch	2
Iss / Rec / OS	Valid issue / example of recording / observation	2
✓ ₂	Valid result / conclusion / evaluation	2
~~	Significant part of answer	N/A
⌘	Page seen by examiner / Information not valid	N/A

1. INTRODUCTION (5 marks):

4 x SRPs: 1 mark each

C/L: 1 mark

- Aims must relate to investigation and must be specific and qualified.

2. PLANNING (5 marks):

4 x SRPs: 1 mark each

C/L: 1 mark

- Identifying information required and methods of gathering.
- Reference to revision must be specific.
- All statements must be qualified e.g. practicing equipment where/how/why?
- Work completed solely by the teacher = 0 marks

3. GATHERING OF DATA (40 marks):

Two methods / tasks @ 18 marks each.

For each method / task: 9 x SRPs @ 2 marks each

C/L: 4 marks graded (4/2/0)

- The gathering section must be activity based. This section deals with the reporting on how the gathering was undertaken. It should include description of the activities carried out.
- A method may be a task which is a group of relevant linked activities. Tasks/methods must be reported in the context of the stated aims.
- Secondary sources of information can generate Primary data.
- Simple statements are not sufficient e.g. I observed the features, I recorded the results, I sketched the landform etc.
- There must be some qualification of the statement e.g. how/where?
- Credit may be given to diagrams/sketches if they illustrate the activity of gathering. One SRP per task/method for well-drawn, neat, relevant labelled sketches/diagrams that are activity based and illustrate the gathering process.
- A further one SRP per task/method can be awarded in the event that there is additional information on a sketch (not in this written section).
- Sketches/diagrams must be on the appropriate pages in the gathering section.
- No marks for results in this written section.
- Coherence is an overall mark awarded for the relevance of the work in this section to the stated aims.

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

Three headings @ 8 marks each.

For each heading: 4 x SRPs @ 2 marks each

C/L: 6 marks graded (6/4/2/0)

- Marks only awarded for Results / Conclusions / Evaluations if in the appropriate section of the reporting booklet.
- Results / Conclusions / Evaluations must be tied to aims and tied to activities carried out in the gathering of information section (Section 3).
- Results can be extracted from charts/table on appropriate graph pages.
- Conclusions are based directly or indirectly on the results, otherwise it is evaluation.
- Conclusions are not tied to a specific result but must be relevant to the tasks completed in Section 3.
- Evaluations should demonstrate higher order thinking and should have a range of themes. They should relate to the aims in Section 1 and the tasks completed in Section 3. They must be specific and qualified.
- Evaluation can be forward-thinking as well as retrospective.
- No double marking of information relating to issues mentioned in Section 3.

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

Two different methods of presentation:

Each presentation: 4 x SRPs @ 2 marks each

Overall coherence (C): 4 marks graded (4/2/0)

- There must be two different forms of presentation of results e.g. graphs, chart, map, table, sketch etc.
- Presentations must be drawn on the appropriate graph pages in Section 4 of the reporting booklet.
- Maximum of 4 x SRPs per method of presentation.
- Overall Coherence refers to the quality and clarity of the presentation. It is 4 marks for the overall presentation. Cannot be awarded OC marks if only one method of presentation is evident.

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's = 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's = 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's = 4 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's = 4 marks

Appendix 1

List of Geographical Investigation Topics 2023

1. A study of migration and its impact on population in a rural or urban area.
2. Analyse the relationship between traffic flow and economic activity in a local area.
3. Investigate the role played by geomorphic processes on the formation of **one** landform in a fluvial **or** coastal **or** glacial environment.
4. A study of the impact of weathering on landscape development.
5. Investigate the causes and impacts of an environmental issue in a local area.
6. Human interaction with geomorphic processes in a glacial **or** coastal **or** fluvial **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 ghnáthráta 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.

