



Coimisiún na Scrúduithe Stáit
State Examinations Commission

Leaving Certificate Examination 2021

Geography

Part Two

Ordinary Level

Friday 11 June Morning 9:30 – 12:20

300 marks

Do not hand this up

PART TWO – STRUCTURED QUESTIONS – 200 MARKS

You must attempt **TWO** questions. Each question must be from a different section.

- 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)

All questions carry equal marks.

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

SECTION 1
PATTERNS AND PROCESSES IN THE PHYSICAL ENVIRONMENT

Questions 1 to 3

All questions carry 100 marks.

Question 1

1A. Ordnance Survey Map

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

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

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

- Lough Cullin
- Griffins Island
- An area of mixed woodland
- The entire area of land above 200 metres in the north-east of the map
- The entire course of the Clydagh River.

[30m]

1B. Volcanoes

- (i) Name **two** examples of volcanoes.
- (ii) Discuss the positive effects of volcanoes.
- (iii) Discuss the negative effects of volcanoes.

[40m]

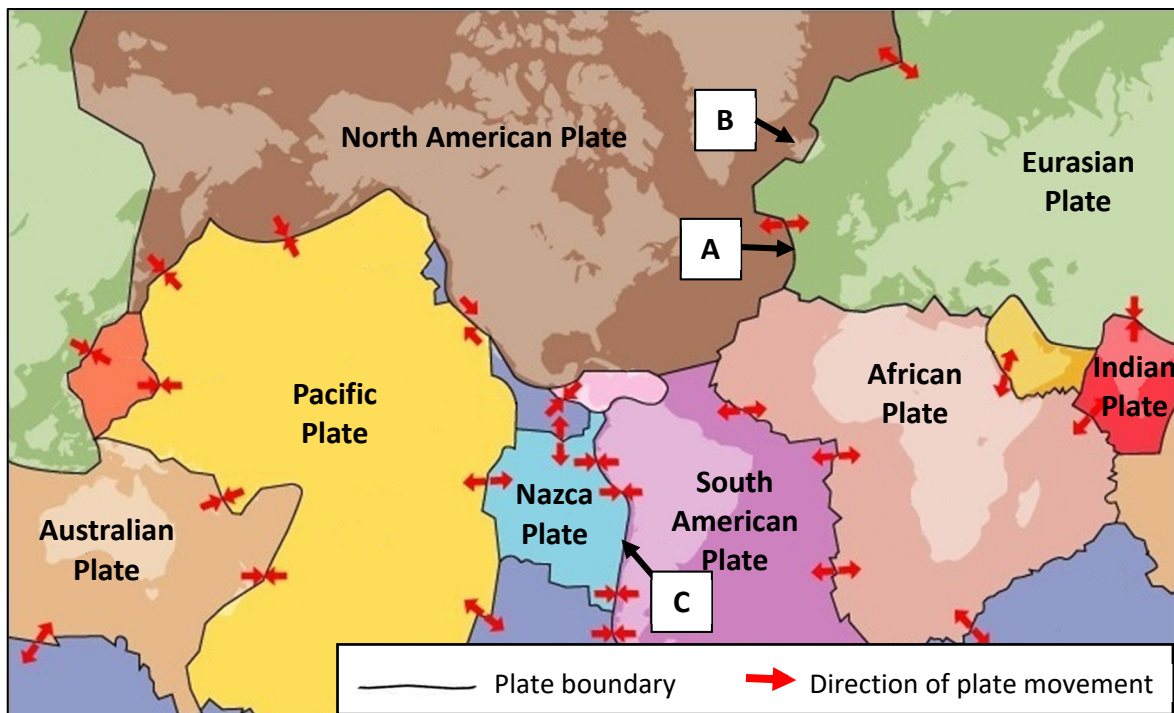
1C. Rocks

- (i) Name **one** example of a sedimentary rock **and** state an Irish location where it can be found.
- (ii) Describe and explain how sedimentary rocks are formed.

[30m]

Question 2

2A. Plate Tectonics



Amended from www.usgs.gov

Examine the map of the world above showing plate boundaries and answer each of the following questions.

- (i) Are the plates colliding or separating at **A**?
- (ii) Name the ocean ridge that runs North – South along the plate boundary at **A**.
- (iii) Name the volcanic island found at **B**.
- (iv) Name the plate on which Ireland lies.
- (v) Name the **two** plates that are colliding together at the boundary labelled **C**.
- (vi) Name **one** landform that is formed at colliding plate boundaries **and** name **one** example of this landform.
- (vii) Explain briefly how plates move.

[30m]

2B. Surface Processes

Answer (i) or (ii)

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

or

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

[40m]

2C. Human Interaction with the Rock Cycle

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

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

[30m]

Question 3

3A. Surface Processes



Amended from www.nen.gov.uk, www.mountainsafety.co.uk and www.collinsdictionary.com

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

- (i) In your answer book, match each of the letters **A**, **B** and **C** on the photographs above, with the feature that best matches it from the list below:
- Scree slope
 - Limestone pavement
 - Tombolo.
- (ii) In your answer book, match each of the letters **A**, **B** and **C** on the photographs above, with the process most associated with its formation from the list below:
- Coastal deposition
 - Physical/mechanical weathering
 - Chemical weathering.
- (iii) Name **one** process of physical/mechanical weathering.
- (iv) Name **one** process of chemical weathering.
- (v) Explain briefly the process of *hydraulic action*.

[30m]

3B. Earthquakes

- (i) Name **two** geographical locations where earthquakes have occurred.
- (ii) Name **one** scale used to measure earthquakes.
- (iii) Explain how earthquakes occur **and** describe their main effects.

[40m]

3C. Human Interaction with Surface Processes

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

- River processes
- Coastal processes
- Mass movement.

[30m]

SECTION 2

REGIONAL GEOGRAPHY

Questions 4 to 6

All questions carry 100 marks.

Question 4

4A. 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:

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

[30m]

4B. Secondary Economic Activity in an Irish Region

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

- Name **one** example of a secondary economic activity in this region.
- Explain the advantages that this region has for the development of this secondary economic activity.
- Describe **one** challenge faced by this secondary economic activity in this region.

[40m]

4C. Concept of a region

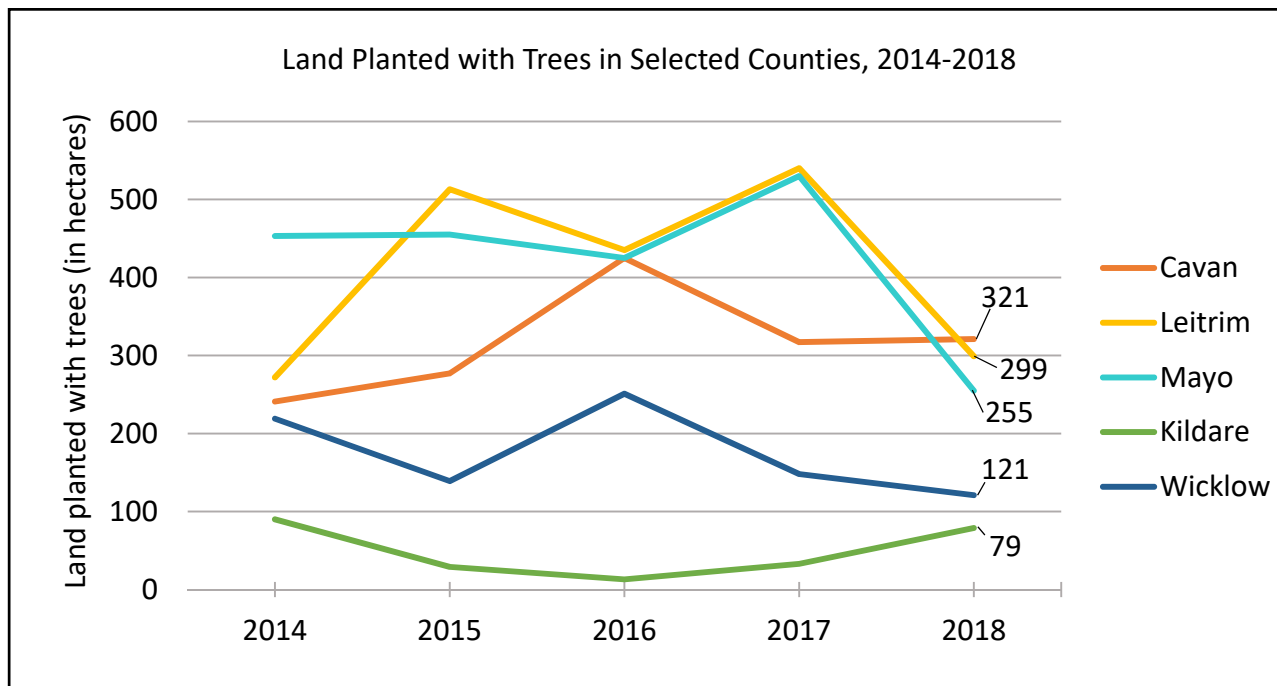
Describe and explain, using examples, any **two** of the region types listed below:

- Climatic regions
- Geomorphological regions
- Cultural regions defined by language
- Cultural regions defined by religion.

[30m]

Question 5

5A. Forestry in Ireland



Amended from www.agriculture.gov.ie

Examine the line graph above showing the area of land planted with trees in selected counties between 2014 and 2018 and answer each of the following questions.

- Name **two** counties that had more than 300 hectares of land planted with trees in 2016.
- In which year between 2014 and 2018 was the most land in Wicklow planted with trees?
- Which county had the most land planted with trees in 2018?
- Calculate the difference between the land planted with trees (in hectares) in 2018 in Mayo and Kildare.
- State **two** physical factors that make Ireland suitable for forestry.
- Explain briefly **one** advantage of forestry to the Irish economy.

[30m]

5B. Urban Regions

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

[30m]

5C. Primary Economic Activity in a Continental / Sub-Continental Region

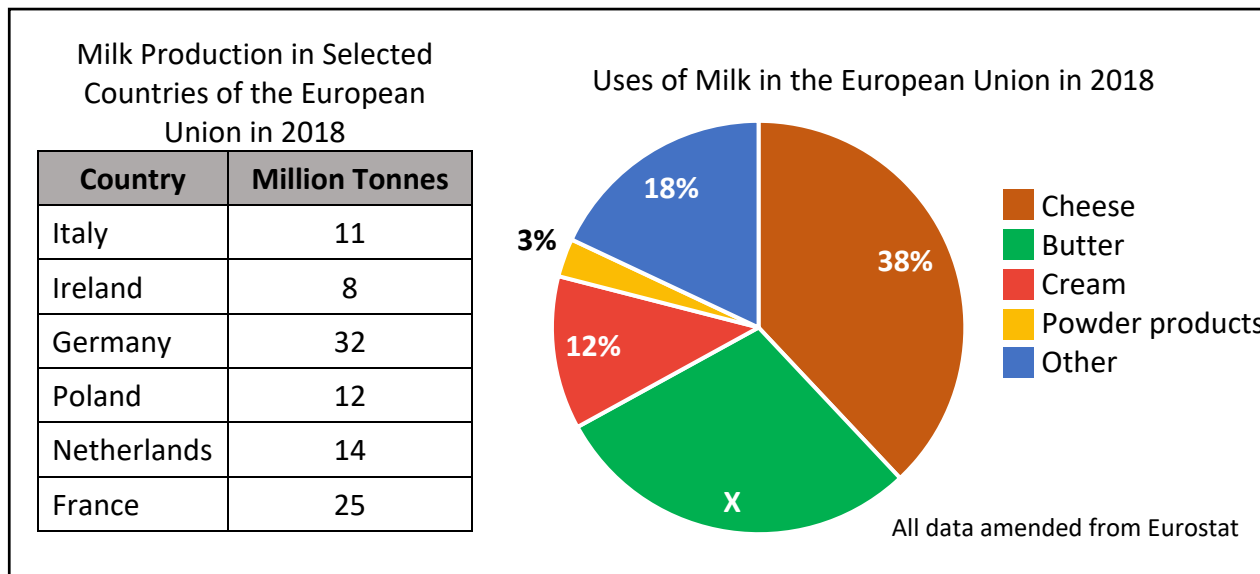
Answer each of the following questions with reference to a **Continental / Sub-Continental** region (**not in Europe**) that you have studied.

- (i) Name **one** primary economic activity that contributes to the economy of this region.
- (ii) Explain the advantages that this region has for the development of the primary economic activity named in part (i) above.
- (iii) Describe **one** problem faced by this primary economic activity in this region.

[40m]

Question 6

6A. European Union – Agriculture



Examine the table and chart above showing information on the amount of milk produced in the European Union in 2018 and how it was used and answer each of the following questions.

- How much milk (in million tonnes) was produced in the Netherlands in 2018?
- Which country listed in the table above produced the most milk in 2018?
- What percentage of milk was used to make cream?
- Calculate **X**, the percentage of milk that was used to make butter.
- Which product was milk most used for in 2018?
- Name **two** types of farm found in Ireland.
- Explain briefly **one** advantage of European Union membership for Irish farmers.

[30m]

6B. Economic Activities – European Region

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

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

[40m]

6C. Regional Problems

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

[30m]

SECTION 3

ELECTIVES

Questions 7 to 12

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

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

All questions carry 100 marks.

PATTERNS AND PROCESSES IN ECONOMIC ACTIVITIES

Questions 7 to 9

Question 7

7A. Energy Use in Ireland

Percentage Share of Energy Related
CO₂ Emissions by Sector for Ireland in 2018

Sector	% Share
Transport	40
Residential	24
Industry	21
Services	13
Agriculture	2

Amended from www.seai.ie

Examine the data above on energy related CO₂ emissions by sector for Ireland in 2018 and answer each of the following questions.

- (i) Using graph paper, draw a suitable graph to illustrate this data.
- (ii) In your answer book, explain briefly **one** negative impact of CO₂ emissions.

[30m]

7B. Multinational Company (MNC)

- (i) Name **one** multinational company operating in Ireland.
- (ii) Name **one** raw material used by this multinational company **and** name the country from which this raw material is sourced.
- (iii) Name **one** product manufactured by this multinational company.
- (iv) State where this multinational company is located in Ireland **and** explain in detail why it set up at this location.

[40m]

7C. Ireland and the European Union

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

[30m]

Question 8

8A. Aerial Photograph

Examine the aerial photograph of Foxford accompanying this paper.

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

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

- The river
- **Two** connecting streets
- A bridge
- An area of forest in the left background
- An area of waste ground in the right background.

[30m]

8B. Economic Activity – Environmental Pollution

- (i) Name **one** example of environmental pollution caused by economic activity.
- (ii) Explain the causes **and** effects of this environmental pollution.
- (iii) Describe how this environmental pollution could be reduced.

[40m]

8C. Economic Development – Developed Economy

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

- Tourism
- Financial services
- Service and footloose industries.

[30m]

Question 9

9A. Human Development Index

Human Development Index (HDI) Data for Selected Countries, 2018

Country	Human Development Index (HDI)	Life expectancy at birth (years)	Expected years of schooling	Gross national income per capita (US\$)
Ireland	0.942	82.1	18.8	55,660
Mali	0.427	58.9	7.6	1,965
Mexico	0.767	75	14.3	17,628
Australia	0.938	83.3	22.1	44,097
Chile	0.847	80	16.5	21,972

Amended from www.hdr.unp.org

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

- (i) Which country had the highest Human Development Index value in 2018?
- (ii) What was the gross national income per capita (in US\$) for Australia in 2018?
- (iii) Which **two** countries had the lowest life expectancy at birth in 2018?
- (iv) Calculate the difference between the gross national income per capita (in US\$) in Ireland and Mexico.
- (v) List **two** reasons why some countries have a higher Human Development Index value than others.
- (vi) Explain briefly **one** factor that influences life expectancy.

[30m]

9B. Ordnance Survey Map

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

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

- (i) State, using a six-figure grid reference, where you would locate the factory.
- (ii) Explain the reasons why you chose this location.
- (iii) Describe **one** disadvantage of locating the factory at this location.

[40m]

9C. Colonialism

- (i) Name **one** developing economy that was colonised.
- (ii) Describe and explain the effects of colonialism on this developing economy.

[30m]

PATTERNS AND PROCESSES IN THE HUMAN ENVIRONMENT

Questions 10 to 12

Question 10

10A. Aerial Photograph

Examine the aerial photograph of Foxford 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 large car park
- **Two** connecting streets
- **Two** churches
- A sports pitch in the right background.

[30m]

10B. Migration – Rural to Urban

- State **two** reasons why people migrate from rural areas to urban areas.
- Describe and explain the effect of this migration on the urban areas that people migrate to.
- Describe and explain the effect of this migration on the rural areas they leave behind.

[40m]

10C. Overpopulation

- Explain briefly what is meant by the term *overpopulation*.
- Describe and explain the causes **and** effects of overpopulation with reference to example(s) that you have studied.

[30m]

Question 11

11A. Population Distribution

Urban and Rural Population in Ireland 2011 and 2016

Area	Population 2011	Population 2016	% of population living in urban areas 2016	% of population living in rural areas 2016
Co. Sligo	65,393	65,535	40	60
Co. Louth	122,897	128,884	66	34
Co. Leitrim	31,798	32,044	11	89
Co. Dublin	1,273,069	1,347,359	98	2
Ireland	4,588,252	4,761,865	63	37

Amended from CSO

Examine the table above showing information on the population in Ireland in 2011 and in 2016 and answer each of the following questions.

- What was the population of Co. Louth in 2011?
- What percentage of Ireland's population lived in rural areas in 2016?
- Calculate the change in the population of Co. Sligo between 2011 and 2016.
- Which county had the highest percentage of population living in rural areas in 2016?
- State **two** reasons why more people in Ireland live in urban areas.
- What percentage of Co. Dublin's population lived in urban areas in 2016?
- Briefly explain **one** reason why Ireland's population is increasing.

[30m]

11B. Developing World City

- Name **one** city in the developing world that is rapidly growing.
- Explain the reasons for the rapid growth of this developing world city.
- Describe the problems caused by this rapid growth.
- Explain **one** solution to these problems.

[40m]

11C. Development of Urban Settlements

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

Explain **three** reasons why the town of Foxford developed at this location, using evidence from the Ordnance Survey map to support each reason.

[30m]

Question 12

12A. Population Density

Population Density in Selected European Countries in 2018

Country	Population Density (persons per km ²)
Ireland	71
Bulgaria	63
Spain	93
Romania	83
Croatia	73

Amended from www.ec.europa.eu

Examine the table above showing information on population density in selected European countries in 2018 and answer each of the following questions.

- (i) Using graph paper, draw a suitable graph or chart to illustrate this data.
- (ii) In your answer book, explain briefly **one** reason why some areas have low population densities.

[30m]

12B. Urban Functions

- (i) Name **one** urban area that you have studied.
- (ii) Name any **two** functions of this urban area.
- (iii) Describe and explain how the functions of this urban area have changed over time.

[30m]

12C. 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.
- (ii) Explain each of the **three** rural settlement patterns named in part (i) above.

[40m]

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