



Coimisiún na Scrúduithe Stáit
State Examinations Commission

Leaving Certificate Examination 2020

Geography

Part Two

Higher Level

Two hours and 50 minutes

400 marks

Do not hand this up

PART TWO – STRUCTURED and ESSAY QUESTIONS – 320 MARKS

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

- **TWO** questions from **Section 1 – Core:**
 - **One** question from Questions 1, 2 and 3 **(80 marks)**
 - AND**
 - **One** question from Questions 4, 5 and 6 **(80 marks)**
- **ONE** question from **Section 2 – Electives (80 marks)**
- **ONE** question from **Section 3 – Options (80 marks)**

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

SECTION 1 – CORE

Questions 1 to 6

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

ONE from **Patterns and Processes in the Physical Environment (Questions 1 to 3)**

AND

ONE from **Regional Geography (Questions 4 to 6)**

All questions carry 80 marks.

PATTERNS AND PROCESSES IN THE PHYSICAL ENVIRONMENT

Questions 1 to 3

Attempt **ONE** question.

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 course of the Avoca River
- A feature of coastal deposition
- The entire route of the waymarked walk named the *Glenart Walk*
- The entire area of land above 200 metres at Ballydonnell in the north of the map.

[20m]

1B. Rocks

Explain the formation of each of the following, with reference to examples that you have studied.

- **One** plutonic igneous rock
- **One** metamorphic rock.

[30m]

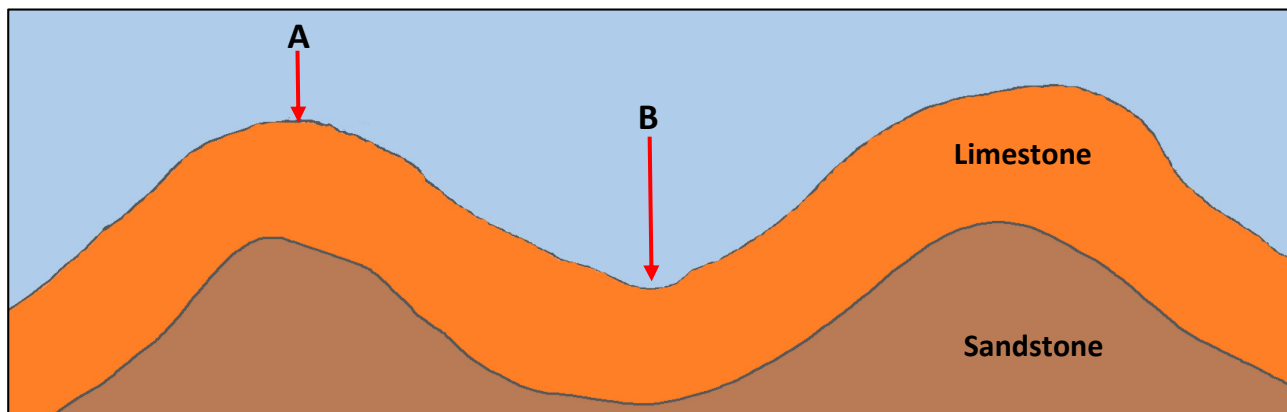
1C. Plate Boundaries

Describe and explain constructive plate boundaries.

[30m]

Question 2

2A. Folding and Faulting



Examine the diagram above which shows the impact of folding on layers of rock during the Armorican fold mountain building period. Answer each of the following questions.

- (i) Name the part of a fold, labelled **A**, that forms when layers of rock are pushed upwards.
- (ii) Name the part of a fold, labelled **B**, that forms when layers of rock are pushed downwards.
- (iii) Name **one** Irish mountain range that was formed as part of the Armorican folding.
- (iv) Name a different period of fold mountain building that shaped the Irish landscape over the last 400 million years.
- (v) Explain briefly the term compression as it relates to folding.
- (vi) Name **two** types of fault.
- (vii) Name **two** landscape features formed by faulting.

[20m]

2B. Surface Processes

Answer (i) or (ii)

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

Or

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

[30m]

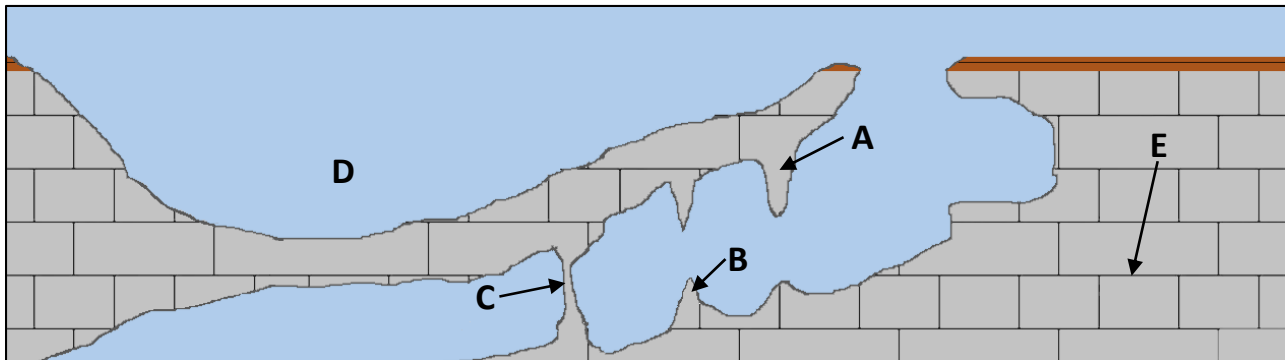
2C. Weathering

Explain **one** process of physical weathering **and one** process of chemical weathering.

[30m]

Question 3

3A. Karst Landscapes



Examine the diagram above which shows a karst landscape and answer each of the following questions.

- (i) Name the features labelled **A**, **B** and **C** in the diagram above.
- (ii) State whether the following statement is true or false.
A doline is the term that describes the feature formed when a cave system collapses, as shown in the area around D.
- (iii) Name **two** features formed on the surface of a karst landscape.
- (iv) What type of rock is most associated with karst landscapes?
- (v) What is the term given to the horizontal lines found in sedimentary rock, shown at **E**?
- (vi) What type of chemical weathering is most associated with the formation of a karst landscape?
- (vii) State what is meant by the term *permeable rock*.

[20m]

3B. Isostasy

Describe and explain how isostasy has shaped the Irish landscape.

[30m]

3C. Human Interaction with the Rock Cycle

Humans interact with the rock cycle in a number of ways.

Describe and explain how this interaction with the rock cycle takes place, with reference to **one** of the following:

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

[30m]

REGIONAL GEOGRAPHY

Questions 4 to 6

Attempt **ONE** question.

Question 4

4A. Map Skills

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

On it, show and name each of the following:

- A named river
- The outline of a named feature of relief (upland or lowland)
- **Two** named urban centres.

[20m]

4B. Secondary Economic Activity

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

- Raw materials
- Markets
- Infrastructure
- Government policy.

[30m]

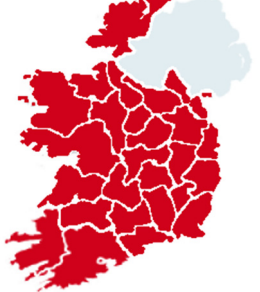
4C. Urban Development

Examine the factors that have influenced the development of **one** urban area in an **Irish** region that you have studied.

[30m]

Question 5

5A. Tourism

Trips to Dublin	Trips to the West	Trips to Republic of Ireland
		
• There were 5.9 million overseas tourists who spent €2 billion. • There were 1.5 million trips taken by Irish residents who spent €307 million.	• There were 1.9 million overseas tourists who spent €694 million. • There were 1.6 million trips taken by Irish residents who spent €353 million.	• There were 9 million overseas tourists who spent €4.9 billion. • There were 9.6 million trips taken by Irish residents who spent €1.9 billion.

Amended from Fáilte Ireland

Examine the graphic above showing Irish tourism data for 2017 and answer each of the following questions.

- How many trips were taken by Irish residents within the Republic of Ireland in 2017?
- How much money (in € million) did overseas tourists spend on trips to the West?
- What percentage of overseas tourists that visited the Republic of Ireland visited Dublin?
- Explain briefly **two** reasons why more overseas tourists visited Dublin than visited the West.
- Explain briefly **one** challenge facing the Irish tourist industry.

[20m]

5B. Population Dynamics

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

[30m]

5C. Socio-Economic Regions

Discuss how economic activity in core regions differs from economic activity in peripheral regions.

[30m]

Question 6

6A. Economic Activity

Employment in Foreign Multinational Companies (MNCs) Operating in Ireland
and Total Employment in Ireland, 2013-2017

Year	MNC Employment (in thousands)	MNC Employment Growth %	Total Employment (in thousands)	Share of Total Employment Attributed to MNCs
2013	300	1.0%	1,971	15.0%
2014	302	0.7%	2,025	14.9%
2015	304	0.8%	2,085	14.6%
2016	311	2.2%	2,164	X
2017	318	2.3%	2,231	14.3%

Amended from CSO

Examine the table above showing information on foreign multinational companies (MNCs) operating in Ireland and total employment in Ireland and answer each of the following questions.

- In what year was there a 0.7% growth in employment in MNCs?
- What was the total employment (in thousands) in 2017?
- Calculate X, the percentage share of total employment attributed to MNCs in 2016.
- Explain briefly **two** reasons why MNCs are attracted to set up in Ireland.
- Explain briefly **one** challenge facing MNCs located in Ireland.

[20m]

6B. Primary Economic Activity

Examine the physical factors that influence the development of agriculture in **two** contrasting **Irish** regions that you have studied.

[30m]

6C. Concept of a Region

Examine how **one** of the following can be used to define cultural regions, with reference to example(s) that you have studied.

- Language
- Religion.

[30m]

SECTION 2 – ELECTIVES

Questions 7 to 12

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

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

OR

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. Ordnance Survey Map

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

Draw a sketch map to half scale of the Ordnance Survey map.

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

- The built up area of Arklow south of the Avoca River
- The entire route of the M11 motorway
- The entire route of the railway line
- The post office in Arklow.

[20m]

7B. Multinational Company

Examine how globalisation impacts on world trade with reference to the operations of **one** multinational company that you have studied.

[30m]

7C. Ireland and the European Union

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

[30m]

Question 8

8A. Government Debt

Eurozone Government Debt Per Person, 2019

Country	Government Debt per person (€ thousands)
Eurozone Average	29
Ireland	43
Greece	30
Spain	25
Italy	38
Belgium	40

Amended from www.debtclocks.eu

Examine the data above showing the government debt of Eurozone countries as an average per person and answer each of the following questions.

- (i) Using graph paper, draw a suitable graph to illustrate this data.
- (ii) Explain briefly **one** reason why Ireland's government has a large debt.

[20m]

8B. Developing Economy

Examine the impact of global trading patterns on **one** developing economy you have studied.

[30m]

8C. Location of Economic Activity

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

Discuss **three** reasons why the Arklow area is a suitable location for the development of tourism. Use evidence from **both** the Ordnance Survey map **and** the aerial photograph to support your answer.

[30m]

Question 9

9A. Measuring Development

Human Development Index (HDI) for Selected Countries

	1990	2000	2010	2017
Norway	0.85	0.917	0.942	0.953
Ireland	0.763	0.857	0.909	0.938
Brazil	0.611	0.684	0.727	0.759
China	0.502	0.594	0.706	0.752
Syria	0.562	0.59	0.644	0.536
Sierra Leone	0.275	0.284	0.385	0.419

Amended from www.hdr.undp.org

Examine the table above showing the Human Development Index (HDI) for selected countries between 1990 and 2017 and answer each of the following questions.

- What was the Human Development Index in China in 2000?
- Which country had the highest Human Development Index in 2017?
- Calculate the difference between the Human Development Index in Brazil in 2017 and Sierra Leone in 2017.
- Name the country where the Human Development Index went down between 2000 and 2017 **and** state **one** possible reason for this decrease.
- Name **two** indicators used to calculate a country's Human Development Index.
- Explain briefly **one** advantage of using the Human Development Index as a measure of economic development.

[20m]

9B. Economic Activity in a 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]

9C. Environmental Impact

Examine the environmental impacts of burning fossil fuels.

[30m]

PATTERNS AND PROCESSES IN THE HUMAN ENVIRONMENT

Questions 10 to 12

Question 10

10A. Aerial Photograph

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 river
- The bridge
- The running track in the middleground
- The lake in the left foreground.

[20m]

10B. Future Urbanism

Discuss **two** issues facing cities of the future.

[30m]

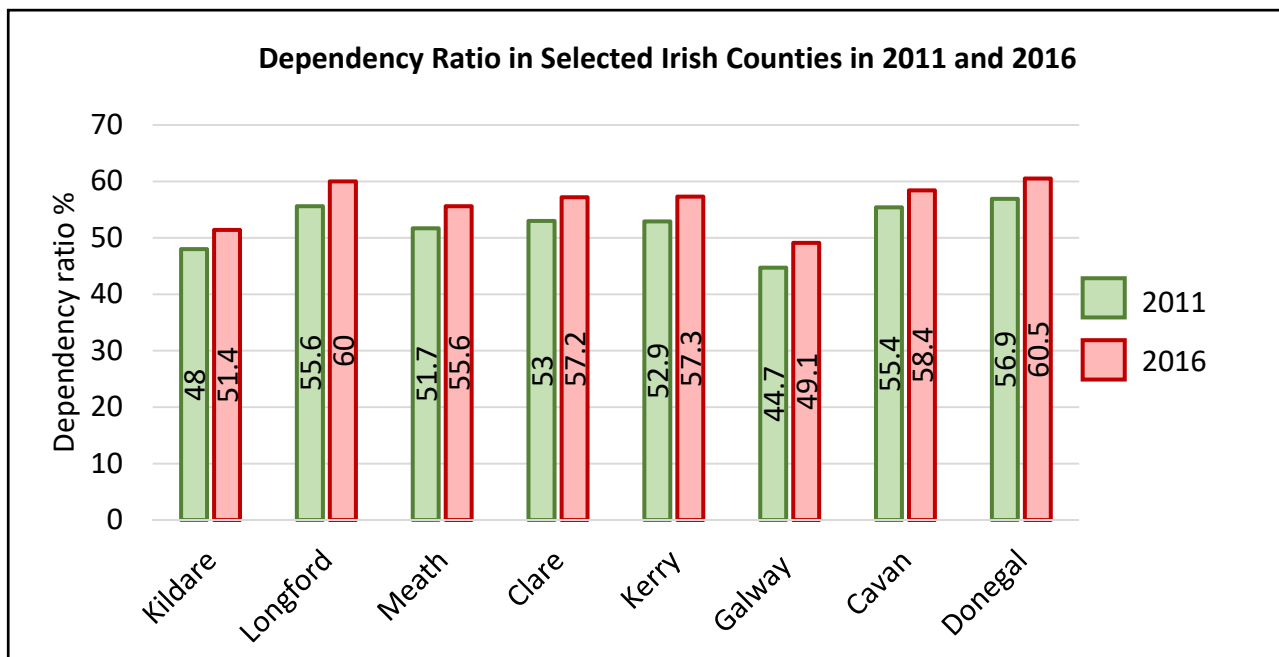
10C. Migration

Describe and explain changing patterns of migration in Ireland since 1950.

[30m]

Question 11

11A. Irish Population



Amended from CSO

Examine the chart above which shows the dependency ratio of selected Irish counties in 2011 and 2016 and answer each of the following questions.

- (i) What was the dependency ratio (%) for Longford in 2011?
- (ii) Which county had the lowest dependency ratio in 2016?
- (iii) Calculate the difference in the dependency ratios (%) for Kildare and Donegal in 2016.
- (iv) Explain briefly **one** reason why dependency ratios in urban areas are usually lower than in rural areas.
- (v) Explain briefly **two** effects of an increase in the dependency ratio.

[20m]

11B. Urban Expansion

As cities expand they impact on the surrounding areas.

Discuss this statement with reference to example(s) that you have studied.

[30m]

11C. Rural Settlement Patterns

With reference to the 1:50 000 Ordnance Survey map accompanying this paper, describe and explain **three** different rural settlement patterns evident on the map.

[30m]

Question 12

12A. Migration

Nationality of Asylum Seekers in Ireland in the first nine months of 2019

Nationality of applicants	% of total applications
Albania	23%
South Africa	7%
Zimbabwe	8%
Georgia	15%
Nigeria	7%
Other	40%

Amended from www.ipo.gov.ie

Examine the data above showing the nationality of asylum seekers to Ireland in the first nine months of 2019 and answer each of the following questions.

- Using graph paper, draw a suitable graph to illustrate this data.
- Explain briefly **one** reason why people apply for asylum.

[20m]

12B. Urban Planning

Examine the effectiveness of urban planning strategies with reference to example(s) that you have studied.

[30m]

12C. Population

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

- Income levels
- Society and culture
- Technology.

[30m]

SECTION 3 – OPTIONS

Questions 13 to 24

Attempt **ONE** question.

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.

Global Interdependence

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

13. Examine the contribution that fair trade can make to sustainable development.

[80m]

14. Empowering people is a way of linking economic growth with human development.

Discuss this statement with reference to any **two** of the following:

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

[80m]

15. We live in an interdependent global economy. Actions or decisions taken in one area have an impact on other areas.

Examine this statement with reference to each of the following:

- Global environmental issues
- Impact of social and political decisions.

[80m]

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. Discuss how human activity can have both positive and negative impacts on soil.

[80m]

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

[80m]

18. Describe the specific climatic characteristics experienced in **one** biome that you have studied **and** examine the impact of these specific climatic characteristics on soils and vegetation in this biome.

[80m]

Culture and Identity

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

19. Examine the strategies that have been or could be implemented to aid the survival of minority languages.
[80m]
20. Identity as a concept entails a variety of cultural factors.
Discuss this statement with reference to a case study of a European region that you have studied.
[80m]
21. Many states have different cultural groups within their borders.
Discuss.
[80m]

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 climate characteristics influence economic development.
[80m]
23. Circulation in both the atmosphere and the oceans gives rise to different weather patterns.
Discuss.
[80m]
24. Climate characteristics change over time and space.
Discuss.
[80m]

Do not hand this up

Leaving Certificate – Higher Level

Geography Part Two

Two hours and 50 minutes