



Coimisiún na Scrúduithe Stáit
State Examinations Commission

Leaving Certificate Examination 2021

Geography

Part Two

Higher Level

Friday 11 June Morning 9:30 – 12:20

320 marks

Do not hand this up

PART TWO – STRUCTURED and ESSAY QUESTIONS – 240 MARKS

You must attempt **THREE** questions. You are not allowed to choose all three questions from the same section. You may choose two questions from the same section if you wish.

- 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)

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 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 Lough Cullin
- The course of the River Moy between G 259 024 and G 269 090
- Mark an **X** at the confluence of the River Moy and the Yellow River
- The entire area of land above 200 metres.

[20m]

1B. 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.

Or

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

[30m]

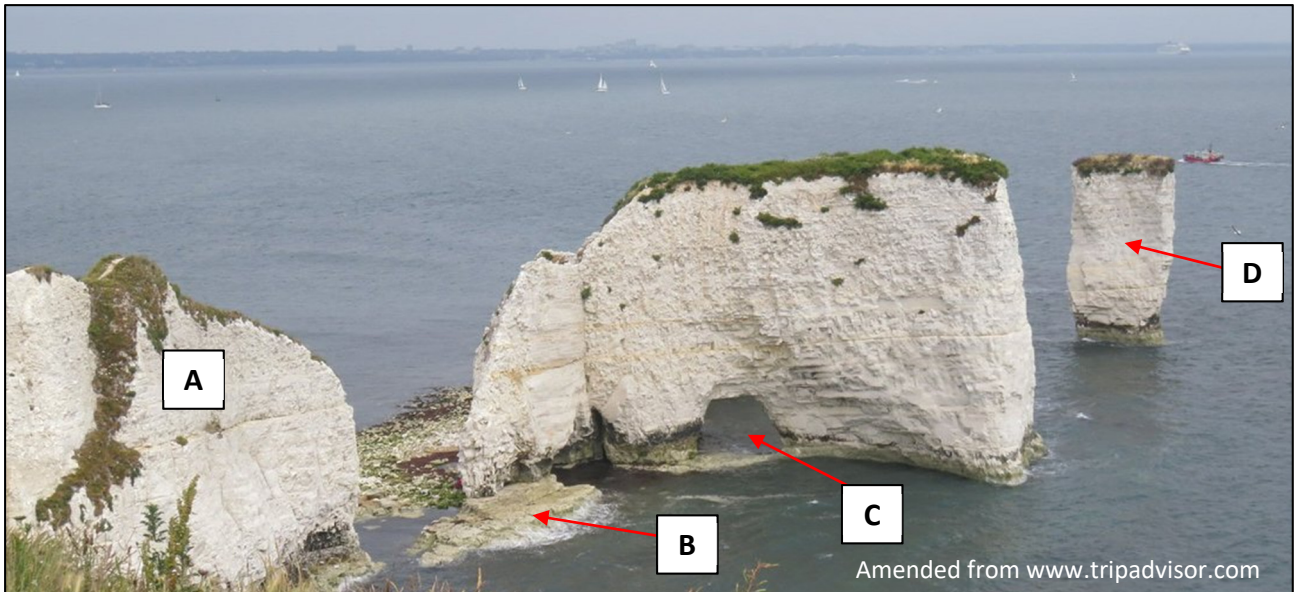
1C. Seismic Activity

Explain how the occurrence of earthquakes can be predicted and their effects reduced.

[30m]

Question 2

2A. Coastal Landforms



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

- (i) Name each of the landforms formed by coastal processes labelled **A**, **B**, **C** and **D**.
- (ii) Name **two** specific processes of coastal erosion.
- (iii) Explain briefly what is meant by *constructive waves*.
- (iv) Explain briefly what is meant by *wave refraction*.

[20m]

2B. Landscape Development

Examine how different rock types produce distinctive landscapes, with reference to examples that you have studied.

[30m]

2C. Human Interaction with Surface Processes

Human activity impacts on surface processes.

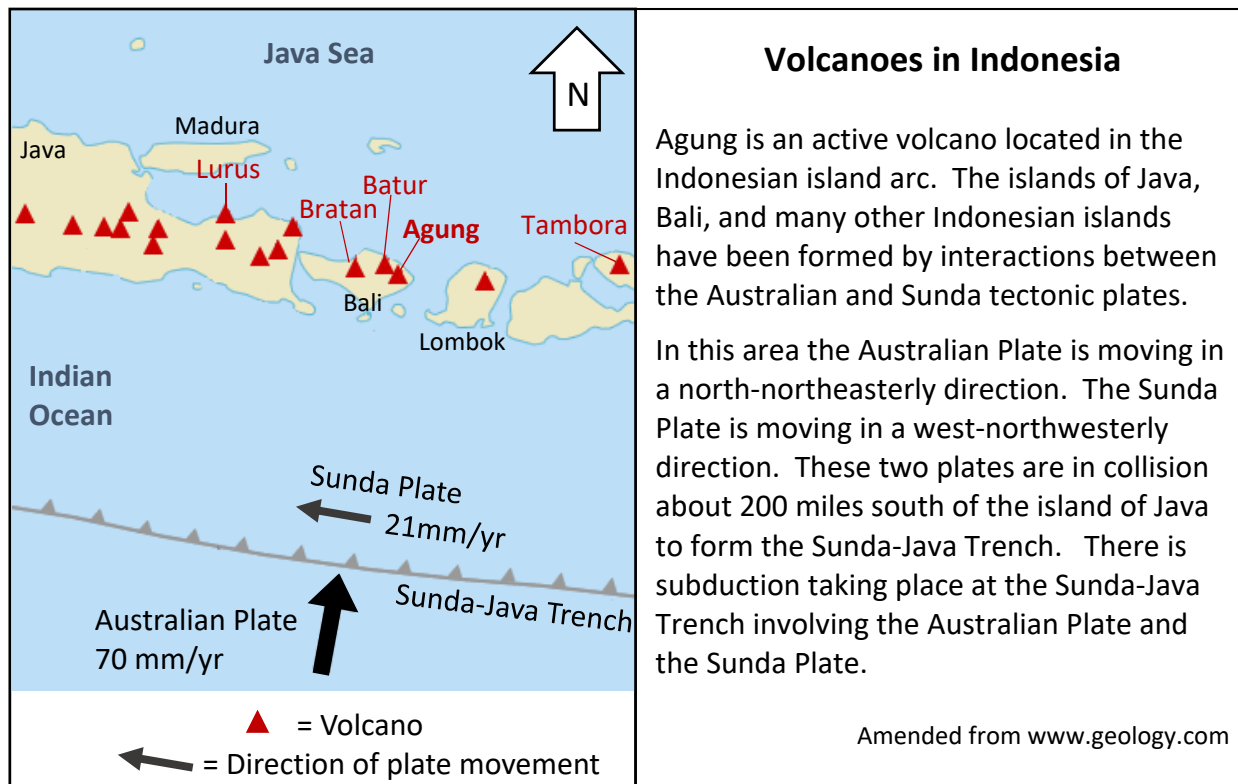
Examine this statement with reference to **one** of the following:

- The impact of flood control measures on river processes
- The impact of coastal defence measures on coastal processes
- The impact of human activities on mass movement processes.

[30m]

Question 3

3A. Volcanoes



Examine the map and text above which give information on volcanoes in Indonesia and answer each of the following questions.

- Name the volcano closest to Agung on the island of Bali.
- In what direction is the Australian Plate moving **and** at what speed (in mm/year) is it moving?
- Name **two** pyroclastic materials that are ejected from a volcano during an eruption.
- What is the name for a volcanic cone that has collapsed in on itself after an eruption?
- Explain briefly what is meant by the process of *subduction*.
- Explain briefly what is meant by a *dormant* volcano.

[20m]

3B. Fluvial Adjustment

Examine how the landscape is changed when a river adjusts to a change in base level, with reference to example(s) that you have studied.

[30m]

3C. Igneous Rock

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

[30m]

SECTION 2

REGIONAL GEOGRAPHY

Questions 4 to 6

All questions carry 80 marks.

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:

- 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]

4B. Secondary Economic Activity

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

[30m]

4C. The European Union

Explain **each** of the following challenges currently facing the European Union:

- Social challenges
- Economic challenges.

[30m]

Question 5

5A. Fishing in the European Union

Number of Vessels in the European Union Fishing Fleet 2008 and 2017 (selected countries)

Country	2008	2017	% share of EU fishing fleet in 2017
Denmark	2,886	2,205	2.7%
Netherlands	822	849	1.0%
Ireland	2,022	2,022	2.4%
Greece	17,138	14,977	18.1%
Italy	13,613	12,250	14.8%
Spain	11,424	9,147	11.1%
Rest of EU	37,536	41,287	49.9%
Total	85,441	82,737	100%

Amended from Eurostat

Examine the table above showing the number of vessels in the European Union (EU) fishing fleet and in selected countries in 2008 and 2017 and answer each of the following questions.

- (i) Which single country from the table above had the highest percentage share of the EU fishing fleet in 2017?
- (ii) Which single country from the table above had an increase in its fleet between 2008 and 2017?
- (iii) What was Italy's percentage share of the EU fishing fleet in 2008?
- (iv) Name **two** Irish fishing ports.
- (v) Briefly explain **two** reasons why there was a decrease in the number of fishing vessels in the EU between 2008 and 2017.

[20m]

5B. Tertiary Economic Activity

Examine **two** factors that have influenced the development of tourism in a **Continental / Sub-Continental** region (not in Europe) that you have studied.

[30m]

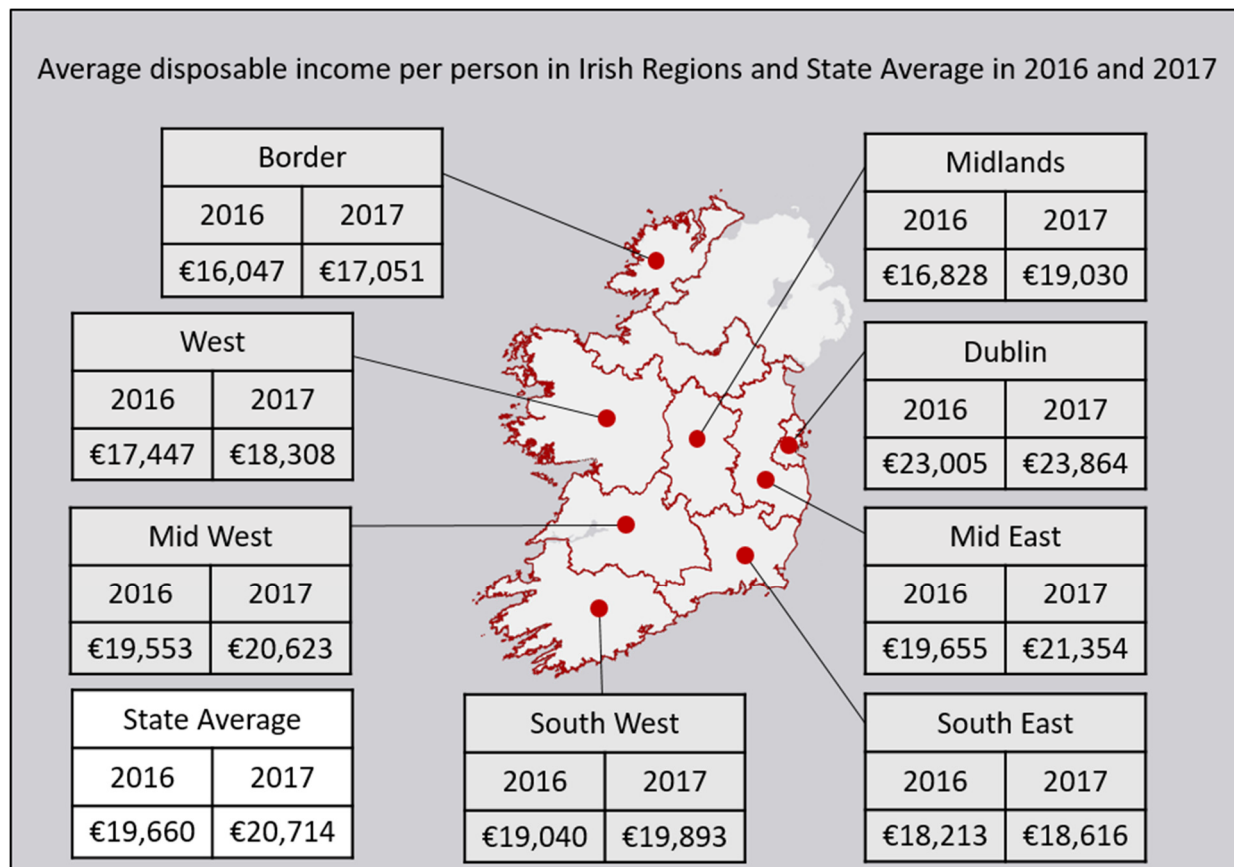
5C. Urban Development

Discuss the factors which influenced the development of **one** urban area in a **European** region (not in Ireland) that you have studied.

[30m]

Question 6

6A. Disposable Income of Irish Regions



Amended from www.arcgis.com and CSO

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

- What was the average disposable income (in €) for the South West region in 2016 **and** in 2017?
- How many regions had an average disposable income below the state average in 2016?
- Calculate the difference between the average disposable income in the Midlands region in 2016 and 2017.
- Which region had the lowest average disposable income in both 2016 and 2017?
- Explain briefly **one** reason why the Dublin region had the highest disposable income in the State.
- Explain briefly **one** way that investment in Ireland's transport infrastructure could help reduce the differences in regional incomes.

[20m]

6B. Primary Economic Activity – Agriculture

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

- Relief
- Climate
- Markets.

[30m]

6C. The Dynamics of Regions – Human Processes

Population dynamics	Language	Religion
Urban development		Rural development

Examine the impact of any **two** of the factors listed in the table above on the development of a **Continental / Sub-Continental** region (not in Europe) 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 80 marks.

PATTERNS AND PROCESSES IN ECONOMIC ACTIVITIES

Questions 7 to 9

Question 7

7A. Aerial Photograph

Examine the aerial photograph of Foxford 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 river
- **Two** connecting streets
- An industrial building
- An area of waste ground in the right background.

[20m]

7B. Multinational Company

Examine the impact of any **two** of the following on **one** multinational company that you have studied:

- The product life cycle
- Corporate strategies influencing the opening and closure of branch plants
- Developments in information technology.

[30m]

7C. Renewable Energy

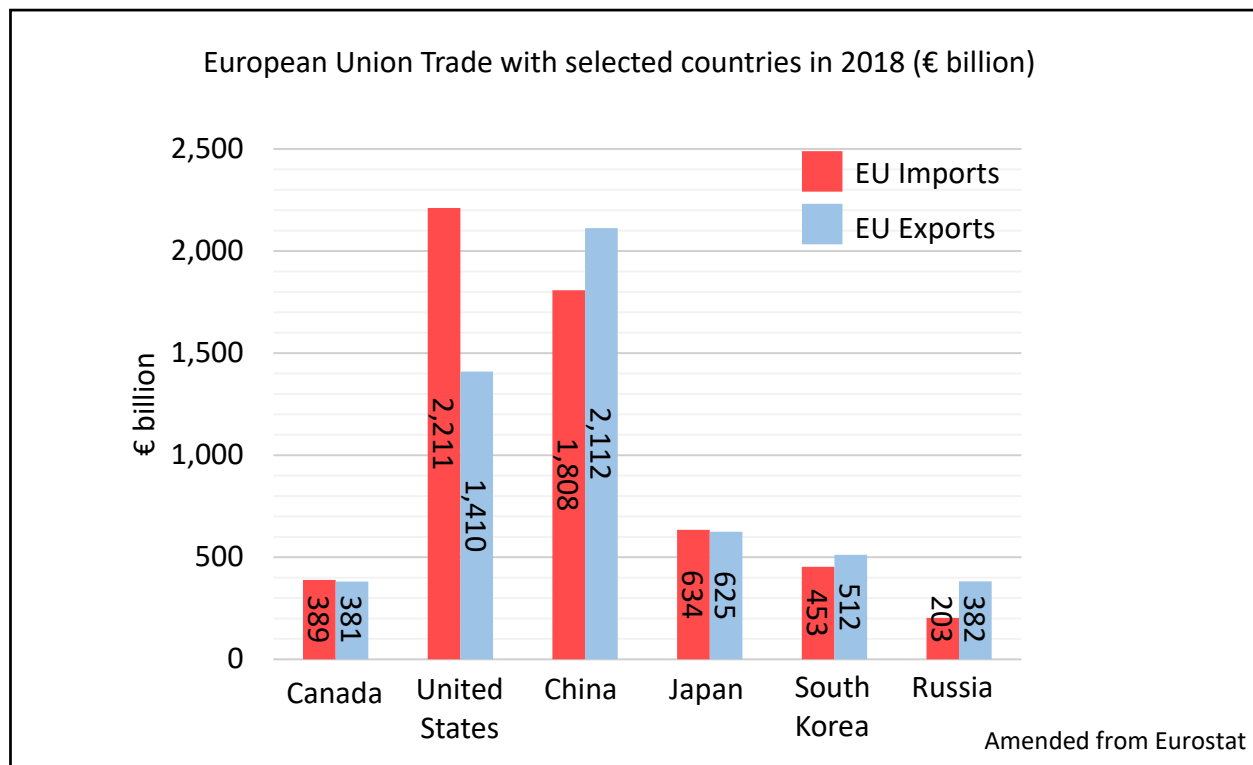
Examine how the development of renewable energy is crucial for both of the following:

- Ireland's environment
- Ireland's economy.

[30m]

Question 8

8A. International Trade



Examine the bar chart above showing the value of European Union (EU) trade with selected countries in 2018 and answer each of the following questions.

- Which of the selected countries above received the highest value of exports from the EU in 2018?
- From which of the selected countries above did the EU receive the lowest value of imports in 2018?
- Calculate the total value of imports into the EU in 2018 (in € billion) from the countries in the bar chart above.
- Name **one** country that the EU had a trade surplus with in 2018.
- Name **one** country that the EU had a trade deficit with in 2018.
- Explain briefly **one** disadvantage of having a trade deficit.
- Explain briefly **one** advantage of having a large number of export partners.

[20m]

8B. Colonialism

Examine the challenges resulting from colonialism faced by a developing economy that you have studied.

[30m]

8C. Location of Economic Activity

Examine the 1:50 000 Ordnance Survey map and legend accompanying this paper and answer each of the following questions.

- (i) Explain **two** reasons why a multinational company might choose to locate in the area covered by the map. Use evidence from the Ordnance Survey map to support each reason.
- (ii) Using evidence from the Ordnance Survey map, explain **one** reason why a multinational company might choose not to locate in this area.

[30m]

Question 9

9A. Economic Activity

Breakdown of Tourist Accommodation
in Ireland in 2019 (%)

Type of accommodation	Percentage of tourists
Friends/relatives	25
Hotels	21
Self-Catering	21
Guesthouses/B&Bs	8
Hostels	4
Other	21

Amended from Fáilte Ireland

Examine the data above showing the breakdown of tourist accommodation in Ireland for 2019 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 is a popular destination for tourists.

[20m]

9B. European Union Policy

Examine the impact of European Union policy on the development of primary economic activity in Ireland.

[30m]

9C. Conflict of Interest

Examine how conflict may arise between the exploitation of natural resources and the need to protect the environment, with reference to example(s) that you have studied.

[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 aerial photograph, half the length and half the breadth.

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

- The river
- A sports field in the right background
- A church
- An off-street car park.

[20m]

10B. Dynamics of Population

Examine how changing fertility and mortality rates impact on population structure with reference to example(s) that you have studied.

[30m]

10C. Migration

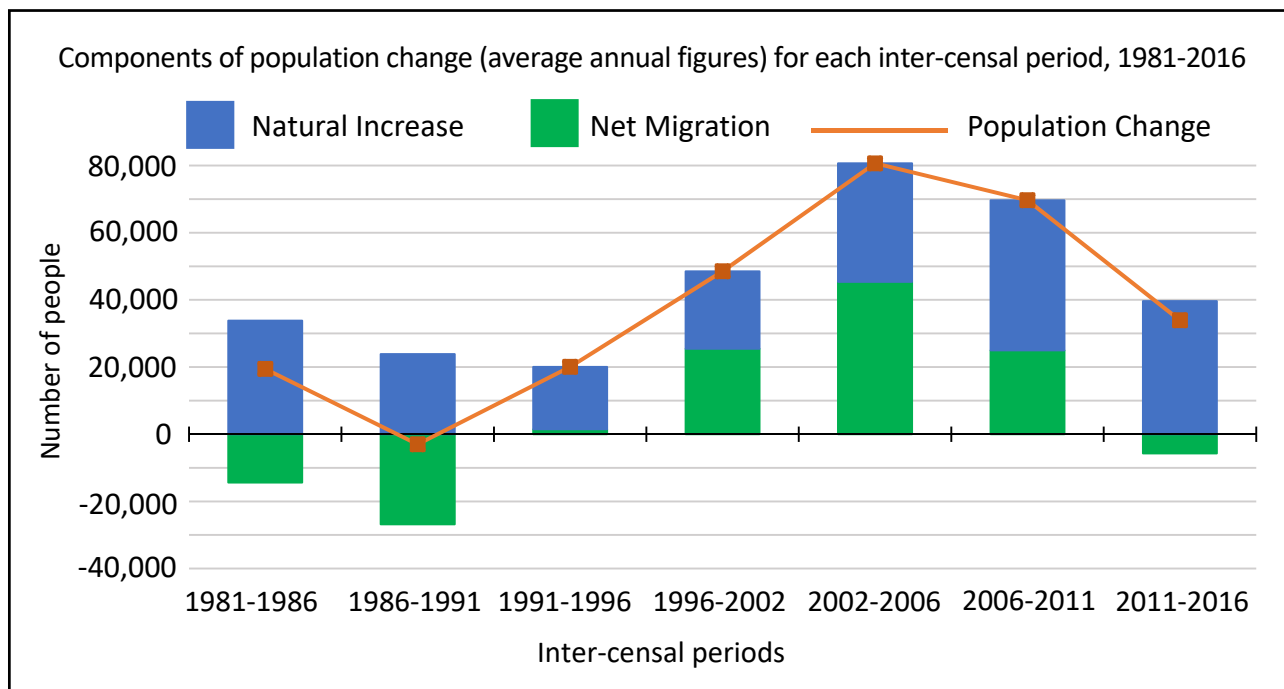
With reference to a developed region that you have studied, explain the impact of migration on each of the following:

- Rural areas
- Urban areas.

[30m]

Question 11

11A. Population Change in Ireland



Amended from CSO

Examine the graph above showing the components of population change in Ireland for each inter-censal period between 1981 and 2016 and answer each of the following questions.

- (i) State whether the following statement is true or false:
In the 2002-2006 inter-censal period, there was a population increase of more than 50,000 people.
- (ii) Was the main cause of population growth in the 2011-2016 inter-censal period a natural increase or net migration?
- (iii) During which inter-censal period was there a population decrease?
- (iv) List **two** inter-censal periods when emigration was greater than immigration.
- (v) Which inter-censal period had the smallest natural increase?
- (vi) Explain briefly the term *natural change*.
- (vii) Explain briefly **one** reason why birth rates decrease.

[20m]

11B. Urban Problems – Developing World City

Discuss how the growth of urban centres can lead to both of the following problems, with reference to example(s) from one or more developing world cities that you have studied:

- Traffic congestion
- Urban sprawl.

[30m]

11C. Urban Settlement

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

Explain **three** reasons why the town of Foxford developed at its present location. Use evidence from the Ordnance Survey map to support each reason.

[30m]

Question 12

12A. Population Dynamics

Population Density in Ireland in Selected Years

Year	Population Density (People per km ²)
1970	42
1980	49
1990	51
2000	55
2010	66
2020	72

Amended from CSO

Examine the data above showing population density in Ireland in selected years 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 the population density in Ireland is rising.

[20m]

12B. Urban Land-Use

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

[30m]

12C. Overpopulation

Examine **two** causes of overpopulation, with reference to an example(s) that you have studied.

[30m]

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.

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

Discuss this statement with reference to desertification **and** deforestation.

[80m]

- 14.** Sustainability is a model for future human and economic development.

Discuss this statement with reference to **three** of the following:

- Resource use
- Fair trade
- Justice issues
- Self-reliance.

[80m]

- 15.** Views of development and underdevelopment are subject to change.

Discuss.

[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.** Various soil patterns have developed because of the action of different soil forming processes.

Discuss.

[80m]

- 17.** Discuss how soil development is influenced by any **three** of the following factors:

- Mineral matter
- Air
- Water
- Organic matter.

[80m]

- 18.** Examine how each of the following activities impact on biomes:

- The felling of tropical rain forests
- Intensive agricultural practices
- Industrial development.

[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 how conflict can arise between political structures and cultural groups.

[80m]

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

[80m]

21. Examine how people express their culture and identity in everyday life with reference to Irish examples that you have studied.

[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 the uneven distribution of temperature over the earth's surface.

[80m]

23. Exchanges of water between oceans and atmosphere, over the earth's surface, impact on precipitation and its distribution patterns.
Discuss.

[80m]

24. Describe and account for the characteristics of **one** global climate type that you have studied.

[80m]

Do not hand this up

Do not hand this up

Do not hand this up

Copyright notice

This examination paper may contain text or images for which the State Examinations Commission is not the copyright owner, and which may have been adapted, for the purpose of assessment, without the authors' prior consent. This examination paper has been prepared in accordance with Section 53(5) of the Copyright and Related Rights Act, 2000. Any subsequent use for a purpose other than the intended purpose is not authorised. The Commission does not accept liability for any infringement of third-party rights arising from unauthorised distribution or use of this examination paper.

Leaving Certificate – Higher Level

Geography Part Two

Friday 11 June

Morning 9:30 – 12:20