Coimisiún na Scrúduithe Stáit
State Examinations Commission

LEAVING CERTIFICATE EXAMINATION, 2014

GEOGRAPHY – ORDINARY LEVEL

FRIDAY, 6 JUNE – MORNING, 9.30 - 12.20

Examination Number

For the Examiner's Use Only

Part One Short-Answer Questions	Total Mark	Adv. Ex.	App. Ex.
Question 1			
Question 2			
Question 3			
Question 4			
Question 5			
Question 6			
Question 7			
Question 8			
Question 9			
Question 10			
Question 11			
Question 12			
Accumulated Mark			
Disallowed Marks			
Net Mark			

Note: Remember to return this paper with your answer book.

Otherwise you will lose marks.

1.   **Ordnance Survey Map**

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

(i)   What is the height in metres of the highest point on the map?
Write the correct answer in the box below.

(ii)   Measure the length in kilometres, of the N72 National Primary Road from where it enters the map at X 210 954 to where it meets the N25 road at X 278 957.
Write the correct answer in the box below.

[10m]

2.   **Ordnance Survey Map**

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

(i)   Name the features which can be found at each of the following grid references.

- S 273 009   _____

- X 257 934   _____

- X 282 952   _____

- X 232 903   _____

(ii)   Name **two** tourist amenities at Wyse's Point, X 296 922.

_____

_____

[10m]

3. **Aerial Photograph**

(i)   Examine the aerial photograph accompanying this paper.

Using accepted notation (right background, etc.), write the correct location of each of the following.

- A Circus   _____

- A Roundabout   _____

- A Sandy beach   _____

(ii)   Was this aerial photograph taken during winter or spring?

_____

State **one** reason for your answer.

_____

_____
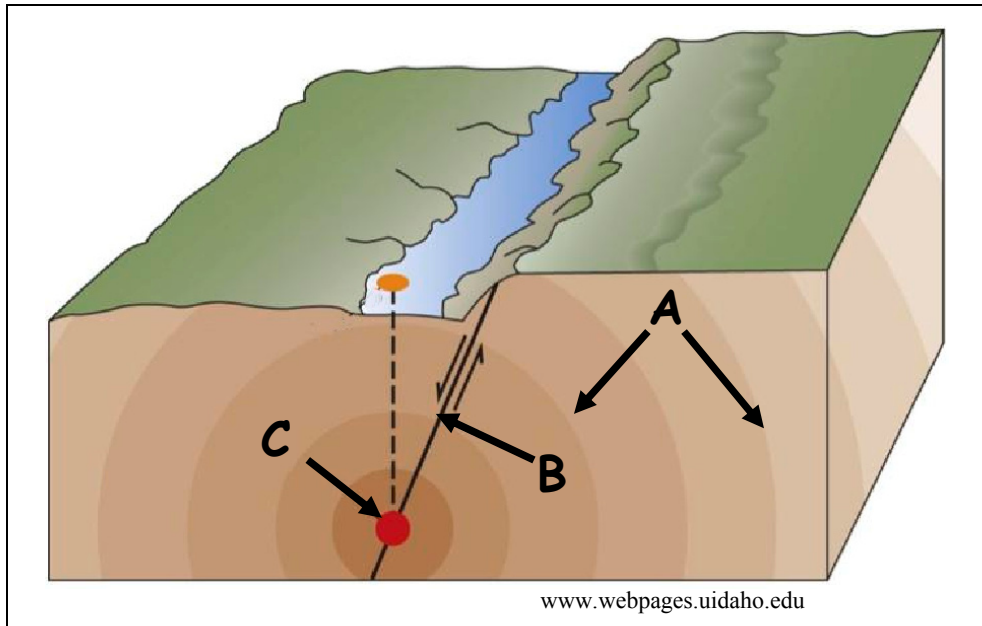
[10m]

4. **Physical Processes**

Match each of the features with the process most associated with its formation, by writing the correct letter in each case, in the table below.

Letter	Feature	Process	Letter
A	V-shaped valley	River deposition	
B	Beach	Coastal deposition	
C	Drumlin	River erosion	
D	Floodplain	Glacial erosion	
E	Cirque / Coom / Corrie	Glacial deposition	

[10m]

5. **Earthquakes**

www.webpages.uidaho.edu

(i)   Match each of the letters **A**, **B** and **C** in the diagram with the correct feature in the table below.
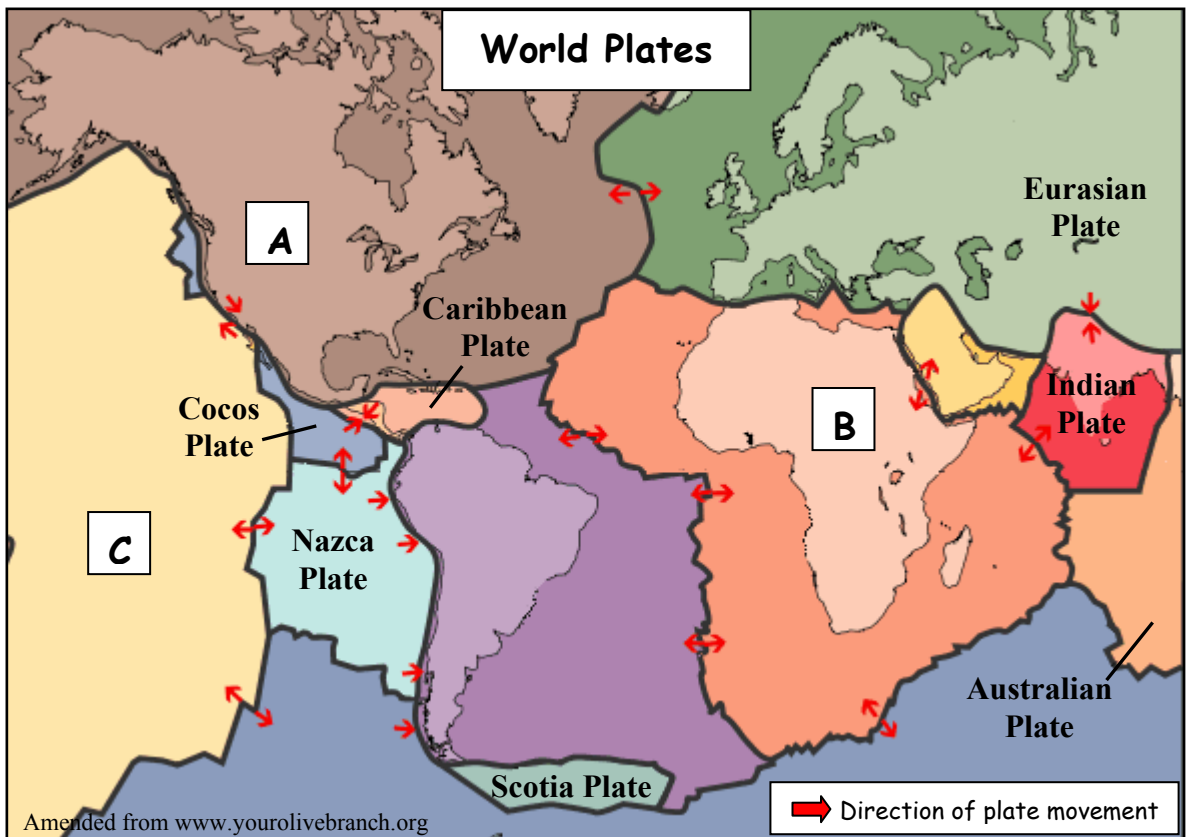
Feature	Letter
Focus	
Shock waves	
Faultline	

(ii)   Name a scale used to measure earthquakes.

_____

(iii)   What is the name given to a large wave caused by an earthquake under the water in the ocean?

_____

[10m]

6.   Plate Tectonics

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

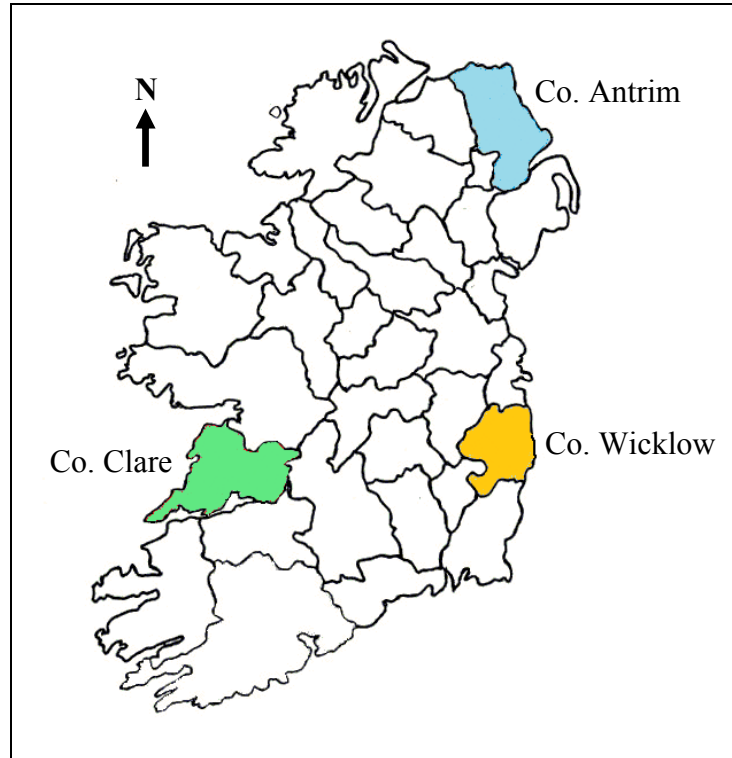(i)   Match each of the letters **A**, **B** and **C** on the map with the correct tectonic plate in the table below.

Tectonic Plate	Letter
African Plate	
North American Plate	
Pacific Plate	

(ii)   Name **two** plates that are colliding together.

_____

(iii)   Name the plate on which Ireland lies.

_____

[10m]

7. **Irish Rocks**

(i) Examine the map and write the correct county in the table below, to match the name of the rock with the location most associated with it in each case.

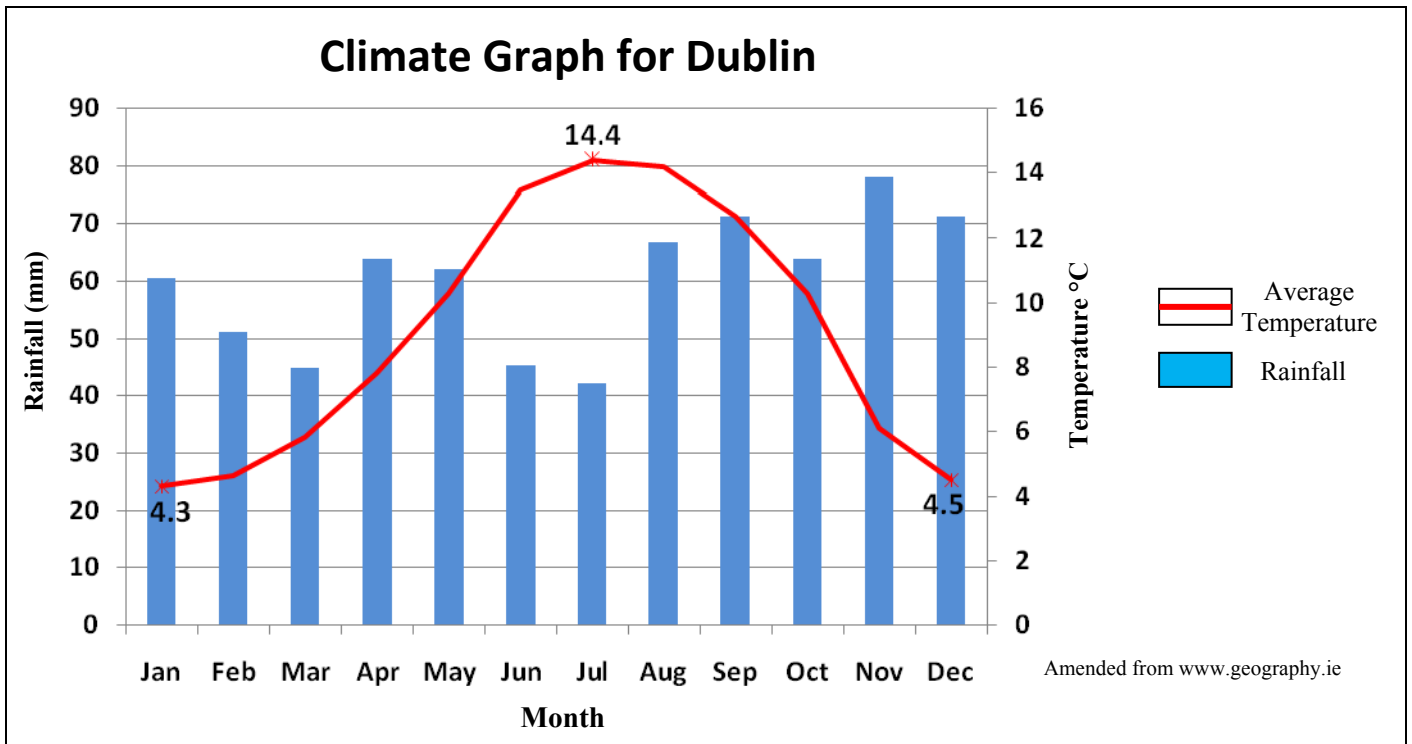| Rock	County
Limestone	
Basalt	
Granite	

(ii) State whether each of the following is an igneous, a sedimentary or a metamorphic rock.

Granite   _____

Limestone   _____

[10m]

8. **Weather Statistics**

Climate Graph for Dublin

Examine the climate graph above showing average temperature and rainfall levels for Dublin and answer each of the following questions.

(i)   Which month had the highest rainfall level? _____

(ii)   Which month had the lowest rainfall level? _____

(iii)   In which month was the highest average temperature recorded?

        _____

(iv)   Did the average temperature fall below 0°C in any month? _____

(v)   What was the average temperature range in degrees Celsius (°C)?

        _____

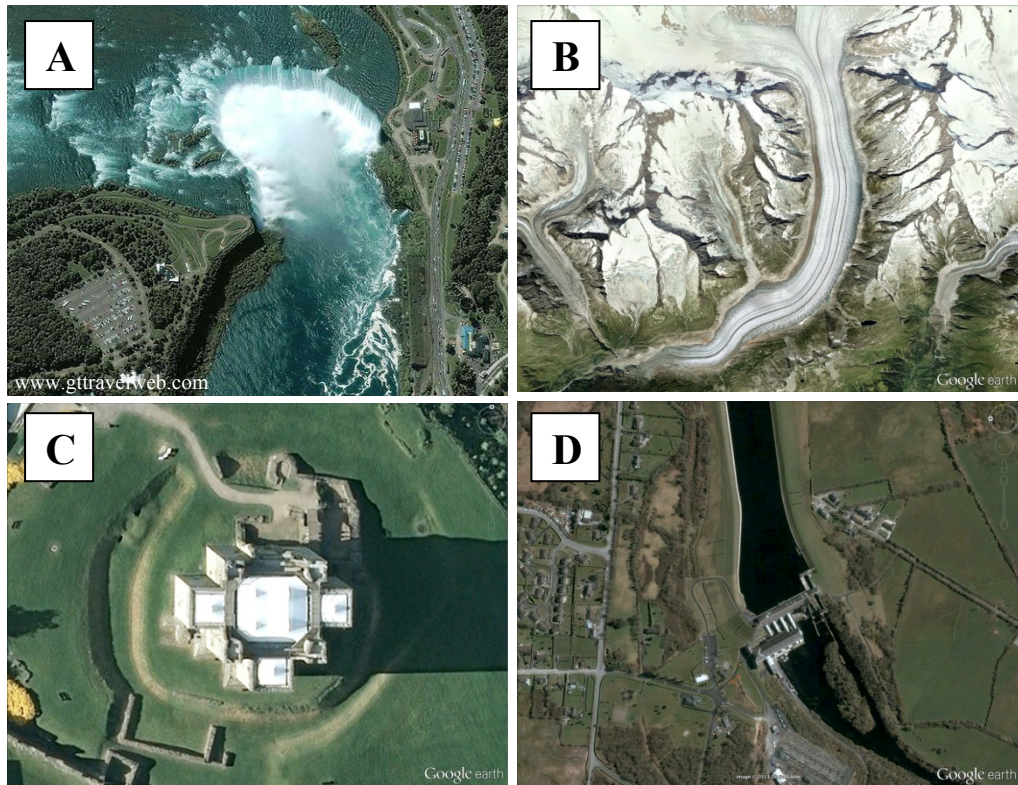**[10m]**

9. **Economic Activity**

A

B

C

D

(i)   Examine the photographs and indicate whether each is an example of a Primary, Secondary or Tertiary economic activity, by ticking the correct box in the table below.

Photograph	Primary Activity	Secondary Activity	Tertiary Activity
A			
B			
C			
D			

(ii)   Name **one** primary economic activity **NOT** shown in the photographs above.

_____

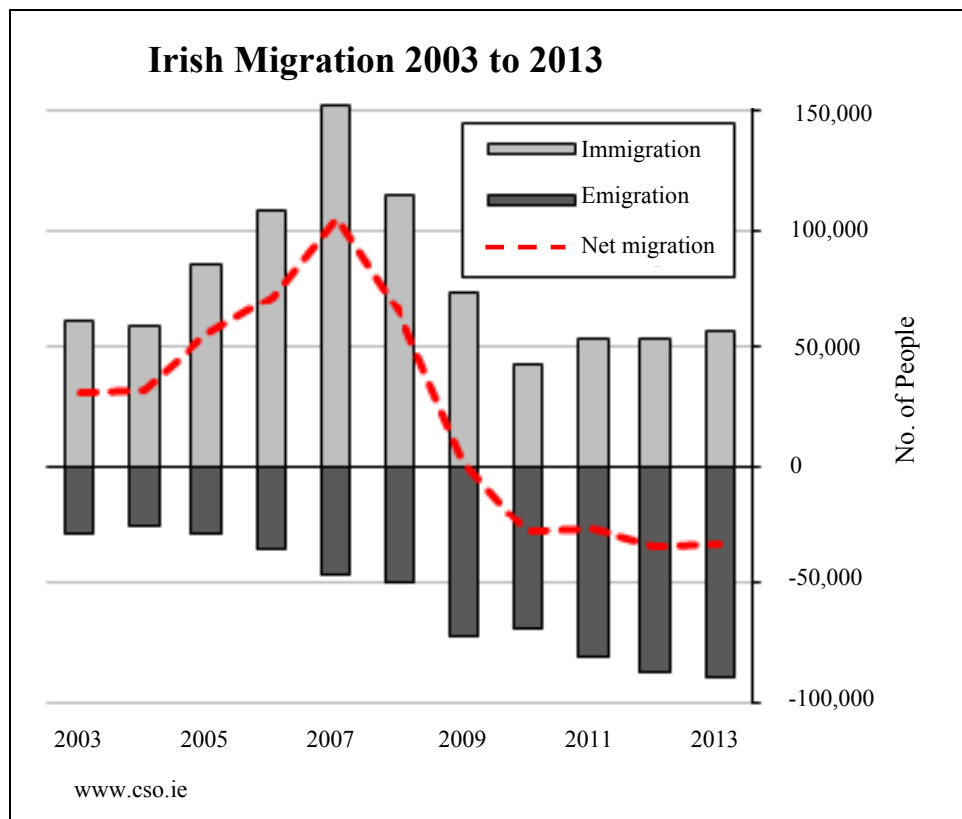**[10m]**

10. Satellite Image Interpretation

(i)   Match each satellite image with the most suitable description, by writing the correct letter in each case, in the table below.

Description	Letter
A flowing glacier in Switzerland	
Hydro electric power station	
Niagara Falls, Canada	
Trim Castle, Co. Meath	

(ii)   State **one** use of satellite images.

_____

[10m]

11. **Graphical Interpretation**

Irish Migration 2003 to 2013

www.cso.ie

Examine the graph above and indicate whether each of the following statements is true or false by circling the correct option in each case.

(i)   Immigration was at its highest level in 2005.   **True   False**

(ii)   Emigration and immigration levels were equal in 2003.   **True   False**

(iii)   Net migration was at its highest level in 2007.   **True   False**

(iv)   Immigration is the movement of people into a country.   **True   False**

(v)   Net migration is the difference between immigration and
        emigration.   **True   False**

                                                                                     [10m]

12. **Regions**

Match the description of a region with the example most associated with it, by writing the correct letter in each case, in the table below.

Letter	Description of Region		Example of Region	Letter
A	Region of industrial decline		Fingal County Council	
B	Peripheral region		Paris	
C	Climatic region		Sambre Meuse	
D	Administrative region in Ireland		Mezzogiorno, Southern Italy	
E	Urban region		The Mediterranean	

[10m]

PART TWO – STRUCTURED QUESTIONS – 300 MARKS

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

- **TWO** questions from **Section 1 – Core**:

    ➢ **One** question from Questions 1, 2 and 3
        AND
    ➢ **One** question from Questions 4, 5 and 6

- **ONE** question from **Section 2 – Electives**

THESE QUESTIONS ARE TO BE ANSWERED IN THE ANSWER BOOK

SECTION 1 – CORE

Questions 1 to 6

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

➢ **ONE** from **Patterns and Processes in the Physical Environment**

AND

➢ **ONE** from **Regional Geography**

Question 1

A.   Earthquakes

> ### Earthquake in the Irish Sea
>
> A 3.8 magnitude earthquake struck this morning. The epicentre was located approximately 2 km off the coast of the Lleyn Peninsula in Wales and was 97 km southeast of Dublin. The quake was followed four minutes later by a smaller 1.7 magnitude tremor.
>
> Moderate shaking was felt in Carlow, Kildare, Wicklow, Wexford and Dublin. Earthquake stations as far away as Valentia, Donegal and Galway also recorded the earthquake.
>
> *Adapted from the Irish Independent, June 28th 2013*

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

(i)   What direction from Dublin was the epicentre of the earthquake **and** how far, in kilometres, was the epicentre from Dublin?

(ii)   Name **two** locations in Ireland where the earthquake was felt.

(iii)   What is the term given to the smaller tremors which follow the main earthquake?

(iv)   State **two** effects of earthquakes.

(v)   Explain briefly why Ireland has not experienced **major** earthquakes.

[30m]

B.   Volcanoes

(i)   Name **two** examples of volcanoes.

(ii)   Describe the negative effects of volcanoes.

(iii)   Describe the positive effects of volcanoes.

[40m]
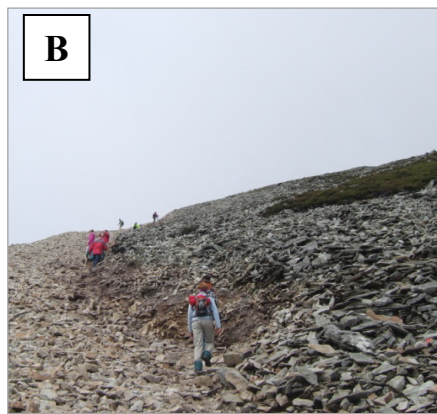
C.   Human Interaction with the Rock Cycle

Describe any **one** of the following examples of human interaction with the rock cycle:

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

[30m]

Question 2

A.   Surface Processes

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

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

- Scree
- U-shaped valley
- Waterfall.

(ii)   State which process, erosion or weathering, is most associated with the features illustrated in each of the photographs **A**, **B** and **C**.

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

[30m]

B.   Karst Landscapes

(i)   Name **one** example of a karst landscape that you have studied.
(ii)   Explain, with the aid of a diagram, how **one surface** feature in a karst landscape is formed.
(iii)   Explain, with the aid of a diagram, how **one underground** feature in a karst landscape is formed.

[40m]

C.   Human Interaction

Describe and explain how humans attempt to control **one** of the following surface processes:

- River processes
- Coastal processes
- Mass movement.

[30m]

Question 3

A. **Ordnance Survey Map**

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

Draw a sketch map of the area shown.
On it, **show** and **label** each of the following:

- An area of land above 300 metres
- **Two** named rivers
- The built up area of Dungarvan
- An area of coniferous plantation.

[30m]

B. **Surface Processes**

Answer (i) **or** (ii).

(i) Select any **one** of the following surface processes:
- Coastal processes
- River processes
- Glacial processes.

Explain, with the aid of diagrams, the formation of any **two** landforms resulting from your selected process.

OR

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

[40m]

C. **Plate Tectonics**

Describe and explain what happens at plate boundaries.

[30m]

Question 4

A. **Continental / Sub-Continental Region**

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

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

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

[30m]

B. **Economic Activity in a European Region**

Name a **European** region (**not in Ireland**) that you have studied and explain any **two** of the following:

- The importance of **transport** to this region
- The reasons why **tourists** are attracted to this region
- The type of **farming** practised in this region
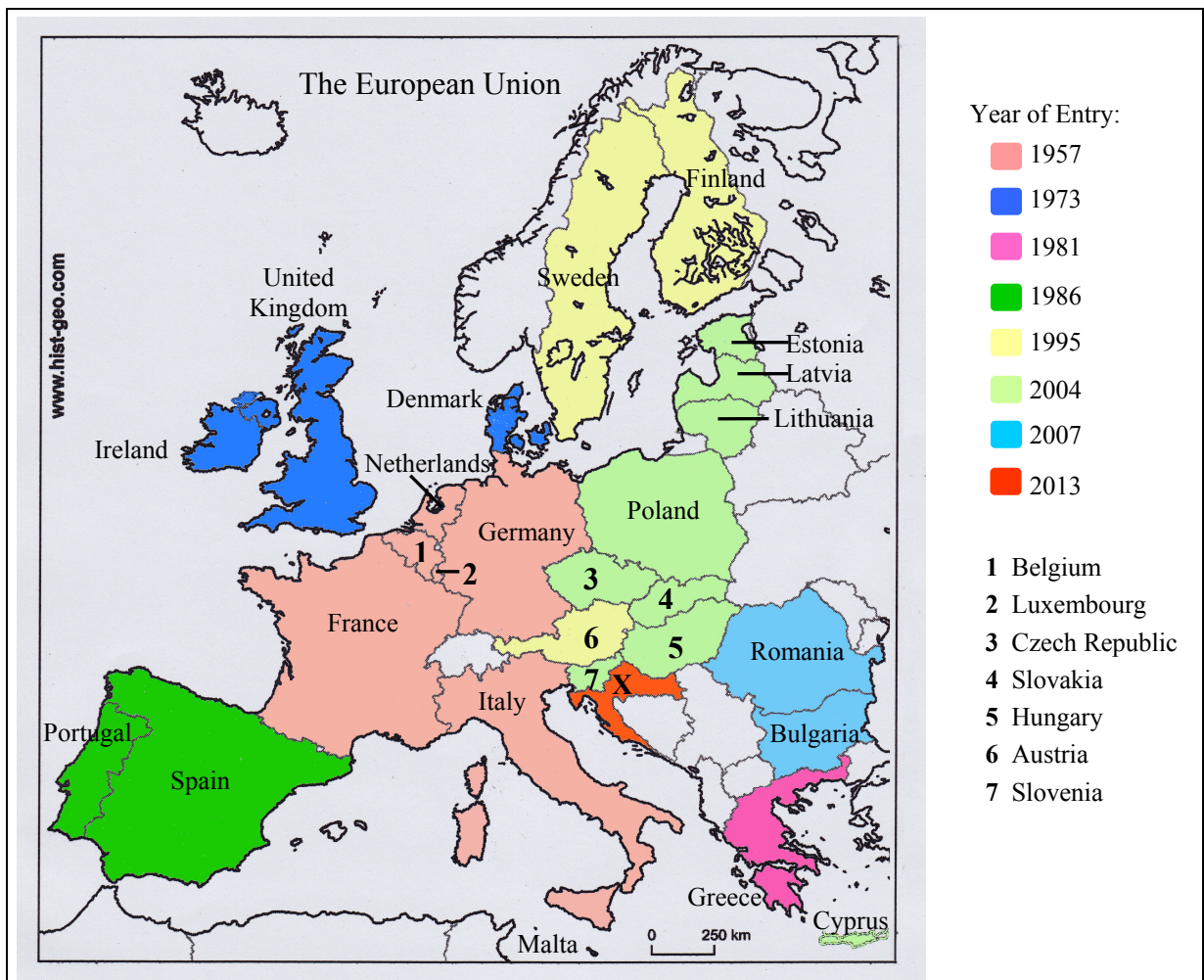- The reasons for the development of **industry** in this region.

[40m]

C. **Urban Growth in Ireland**

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

[30m]

Question 5

A.   European Union

The European Union

Year of Entry:
- 1957
- 1973
- 1981
- 1986
- 1995
- 2004
- 2007
- 2013

1 Belgium
2 Luxembourg
3 Czech Republic
4 Slovakia
5 Hungary
6 Austria
7 Slovenia

Examine the map above showing the member states of the European Union and answer each of the following questions.

(i)   Name any **two** of the founding member states.

(ii)   In what year did Ireland join the European Union **and** name **one** other country that joined in the same year?

(iii)   Name the country labelled **X**, that joined the European Union in 2013.

(iv)   Explain briefly **one** advantage for member states of the enlargement of the European Union.

(v)   Explain briefly **one** disadvantage for member states of the enlargement of the European Union.

[30m]

B. **Secondary Economic Activity – Continental / Sub-Continental Region**

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

[30m]

C. **Tourism in an Irish Region**

Name **one Irish** region that you have studied and answer each of the following questions.

(i)   Name **two** tourist attractions in this region.
(ii)   Explain the positive impacts of tourism in this region.
(iii)   Explain the negative impacts of tourism in this region.

[40m]

Question 6

A. European Region

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

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

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

[30m]

B. Agriculture in an Irish Region

Name **one Irish** region that you have studied and answer each of the following questions.

(i)   Name **two** types of agriculture practised in this region.
(ii)   Explain the advantages that this region has for the development of agriculture.
(iii)   Describe the challenges faced by agriculture in this region.

[40m]

C. Regions and Culture

The culture of a region is often defined by religion, language, music, dance and games.

Describe and explain the importance of culture in any region that you have studied.

[30m]

SECTION 2 – ELECTIVES

Questions 7 to 12

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

Patterns and Processes in Economic Activities

OR

Patterns and Processes in the Human Environment

Question 7

A. Economic Development

Levels of Human Development, 2012

Country	Gross National Income per capita ($)	Human Development Index value (HDI)	Life expectancy at birth (years)	Expected Number of Years in School
Botswana	$13,102	0.634	53.0	11.8
Haiti	$1,070	0.456	62.4	7.6
India	$3,285	0.554	65.8	10.7
Ireland	$28,671	0.916	80.7	18.3

www.undp.org

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

(i)   Calculate the difference in the Gross National Income per capita (in dollars) between Haiti and Ireland.

(ii)   How many more years are Irish children expected to spend in school compared to children in India?

(iii)   Explain briefly why life expectancy at birth is lower in some countries.

(iv)   Name the country with the lowest Human Development Index value **and** name the country with the highest Human Development Index value.

(v)   List **two** reasons why some countries have a higher Human Development Index value than others.

[30m]

B. Economic Activity and Conflict

(i)   Name **one** example of how the development of economic activities has resulted in conflict arising between people.

(ii)   Describe and explain this conflict.

[30m]

C. Multinational Company

(i)   Name **one** multinational company that you have studied **and** name **one** location of this multinational company.

(ii)   Describe and explain why this multinational company was set up at this location.

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

[40m]

Question 8

A.   Energy Use

Energy Use in the Home

Energy Use	% Usage
Heating rooms	60%
Hot water	24%
Electrical appliances	7%
Lighting	6%
Cooking	3%

SEAI

Examine the table above which shows energy use in the home.

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

(ii)   In your answer book, name **two** sources of renewable energy.

[30m]

B.   Economic Development – Developed Economy

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

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

(iii)   Describe **one** problem resulting from the growth of tourism **or** financial services in the developed economy named.

[40m]

C.   Ordnance Survey Map

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

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

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

(ii)   Explain **two** reasons in favour of this location.

(iii)   Explain **one** disadvantage of this location.

[30m]

Question 9

A.   Aerial Photograph

Examine the aerial photograph accompanying this paper.

Draw a sketch map of the area shown on the aerial photograph.
On it, **show** and **label** each of the following:

- **Two** connecting streets
- A bridge
- A car park
- An industrial area
- An area of waste ground.

[30m]

B.   Environmental Pollution

(i)   Name **one** example of environmental pollution that you have studied.
(ii)   Explain the cause and effects of this environmental pollution.
(iii)   Describe how this environmental pollution could be reduced.

[40m]

C.   European Union Policy

Choose any **one** of the European Union policies listed below. Describe and explain how this policy has impacted on the Irish economy.

- Common Agricultural Policy
- Common Fisheries Policy
- Regional Development Funds
- Social Funding.

[30m]

Question 10

A.   **Aerial Photograph**

Examine the aerial photograph accompanying this paper.

Draw a sketch map of the area shown on the aerial photograph.
On it, **show** and **label** each of the following:

- **Two** connecting streets
- A car park
- A recreational area
- A residential area
- A shopping centre.

[30m]

B.   **Urban Functions**

Describe and explain how the functions and services of urban areas change over time, with reference to example(s) that you have studied.

[30m]

C.   **Overpopulation**

(i)   Name **one** region that experiences overpopulation.
(ii)   Explain **one** cause of this overpopulation.
(iii)   Describe the problems that result from overpopulation in this region.
(iv)   Describe **one** solution to the problem of overpopulation.

[40m]

Question 11

A. Travel and Work

Means of Travel to Work in a number of Irish Regions (%)

Region	On Foot	Bicycle	Bus &Train	Motor Cycle	Car	Lorry &Van	Work from home
West	7.9	1.4	2.1	0.2	68.3	9.7	10.4
Dublin	12.8	5.0	19.9	0.9	52.2	3.5	5.7
South East	9.1	0.9	1.3	0.3	69.3	8.9	10.2

Amended from CSO

The table shows the means by which people travel to work in a number of Irish regions.
The percentage of people working from home is also included.
Examine the table and answer each of the following questions.

(i) What was the most popular means of travelling to work?
(ii) Which region had the greatest total percentage of people travelling to work on foot and by bicycle?
(iii) Explain briefly why the Dublin region had the highest percentage of people travelling to work by bus and train.
(iv) List **two** problems that may be experienced in urban areas where a high percentage of people travel to work by car.
(v) List **two** ways authorities in urban areas attempt to reduce the number of people travelling to work by car.

[30m]

B. Historic Settlement

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

(i) Name and locate, using six-figure grid references, **three** different examples of historic settlement evident on the Ordnance Survey map.
(ii) Describe and explain each of the examples of historic settlement named in part (i) above.

[30m]

C. Developing World City

(i) Name **one** city in the developing world.
(ii) Explain the problems experienced in this named city.
(iii) Describe **one** solution to these problems.

[40m]

Question 12

A. World Cities

Population of some of the Most Populous Cities of the World, 2012

City	Population (millions)
Seoul	10
London	8
Manila	12
Istanbul	14

Amended from CIA World Factbook

Examine the data above showing the population of some of the most populous cities of the world in 2012.

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

(ii)   In your answer book, explain briefly **one** problem associated with large cities.

[30m]

B. Migration

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

[40m]

C. Development of Towns

Examine the aerial photograph accompanying this paper.

Using evidence from the aerial photograph, explain **three** reasons why the town of Dungarvan developed at its present location.

[30m]

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