



Coimisiún na Scrúduithe Stáit State Examinations Commission

LEAVING CERTIFICATE EXAMINATION, 2008

GEOGRAPHY – HIGHER LEVEL

FRIDAY, 6 JUNE – AFTERNOON, 2.00 TO 4.50

Examination Number

For the Examiner's Use Only

| PART ONE Short Questions | Total Mark | Adv | App |
|-----------------------------|---------------|-----|-----|
| x 8m | | | |
| x 6m | | | |
| x 4m | | | |
| x 2m | | | |
| Accumulated Mark | | | |

For the Examiner's Use Only

| PART ONE Short Questions | Mark | Adv | App |
|-----------------------------|------|-----|-----|
| Accumulated Mark | | | |
| Disallowed Marks | | | |
| Nett Mark | | | |

**N.B. Remember to return this paper with
your answer book.**

Otherwise, marks will be lost.

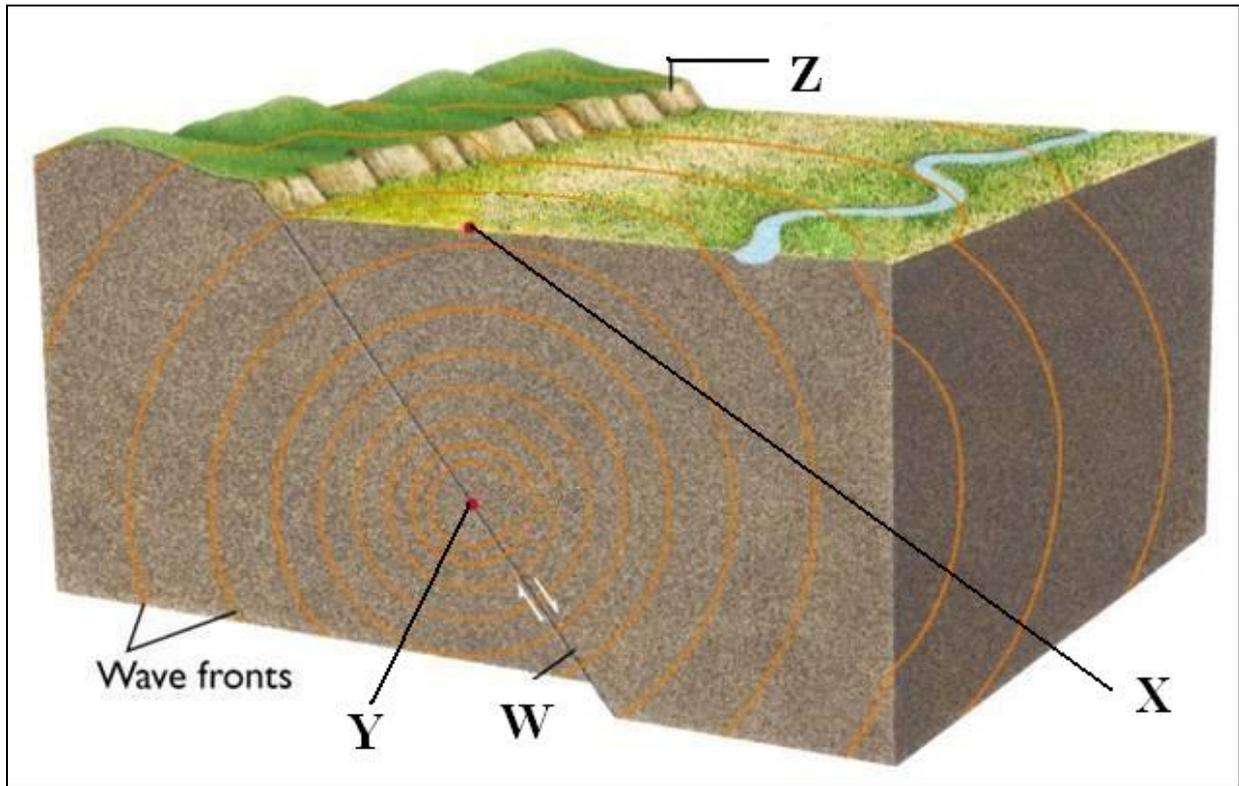
PART ONE – SHORT-ANSWER QUESTIONS – 80 MARKS

Attempt **TEN** questions

All Questions carry equal marks

THESE QUESTIONS TO BE ANSWERED IN THE SPACES PROVIDED

1. Earthquake



Examine this diagram of an earthquake.

Insert the labels W to Z in their correct places in the table below:

| Description | Label |
|-------------|-------|
| Fault line | |
| Focus | |
| Escarpment | |
| Epicentre | |

[8]

2. Ordnance Survey Map

Examine the 1:50000 OS map of Galway and write in the space provided the correct answer from the options given in **each** of the following statements.

- (i) The feature located at **M 327 240** is:

| | |
|------------------------------------|--|
| <i>mudbank / island / sandspit</i> | |
|------------------------------------|--|

- (ii) The historic feature at **M 370 274** is:

| | |
|---|--|
| <i>ringfort / holy well / moated site</i> | |
|---|--|

- (iii) The transport feature at **M 383 255** is:

| | |
|--|--|
| <i>railway station / roundabout / car park</i> | |
|--|--|

- (iv) The total area of the region shown on the extract is:

| | |
|--|--|
| <i>80 sq kms / 108 sq kms / 801 sq kms</i> | |
|--|--|

[8]

3. Types of Region

Match **each** of the region types in Column X with the correct example in Column Y:

Column X

| | |
|------------------------|---|
| Climate Regions | A |
| Administrative Regions | B |
| Socio-Economic Regions | C |
| Cultural Regions | D |

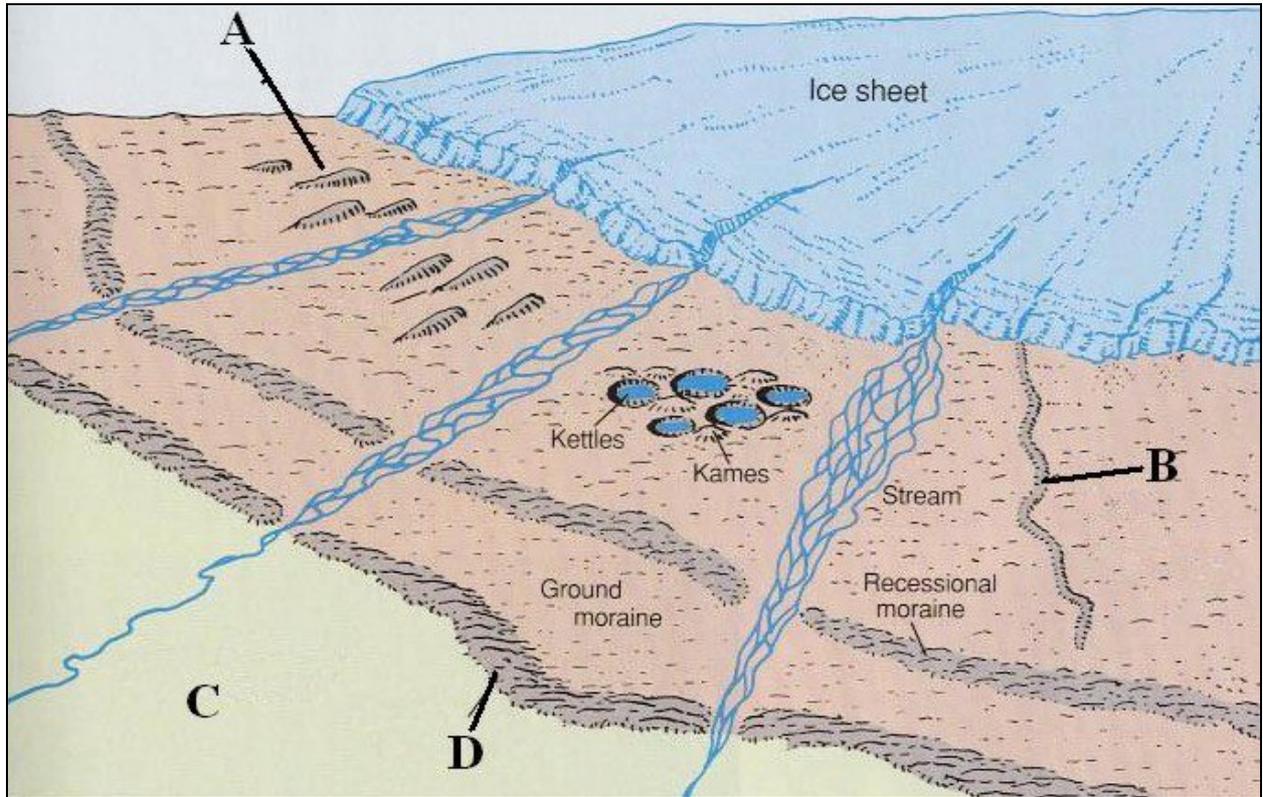
Column Y

| | |
|------------------------|--|
| Ireland's Counties | |
| Gaeltacht | |
| Cool Temperate Oceanic | |
| Core and Periphery | |

[8]

4. Glacial Landforms

Examine this diagram, showing some glacial landforms.



www.geography.vt.edu

Insert the labels A to D in their correct places in the table below:

| | |
|------------------|--|
| Esker | |
| Terminal Moraine | |
| Out wash plain | |
| Drumlin | |

[8]

5. Aerial Photograph

Examine the aerial photograph of part of Galway city that accompanies this paper.

(i) What type of aerial photograph is it?

Vertical High oblique Low oblique

(ii) Examine this section taken from the aerial photograph:



Using the correct reference system, describe its location:

[8]

6. Land-use

Examine the aerial photograph that accompanies this paper.

Name and locate **two** land-uses which can be seen on the photograph:

Land-use 1: _____

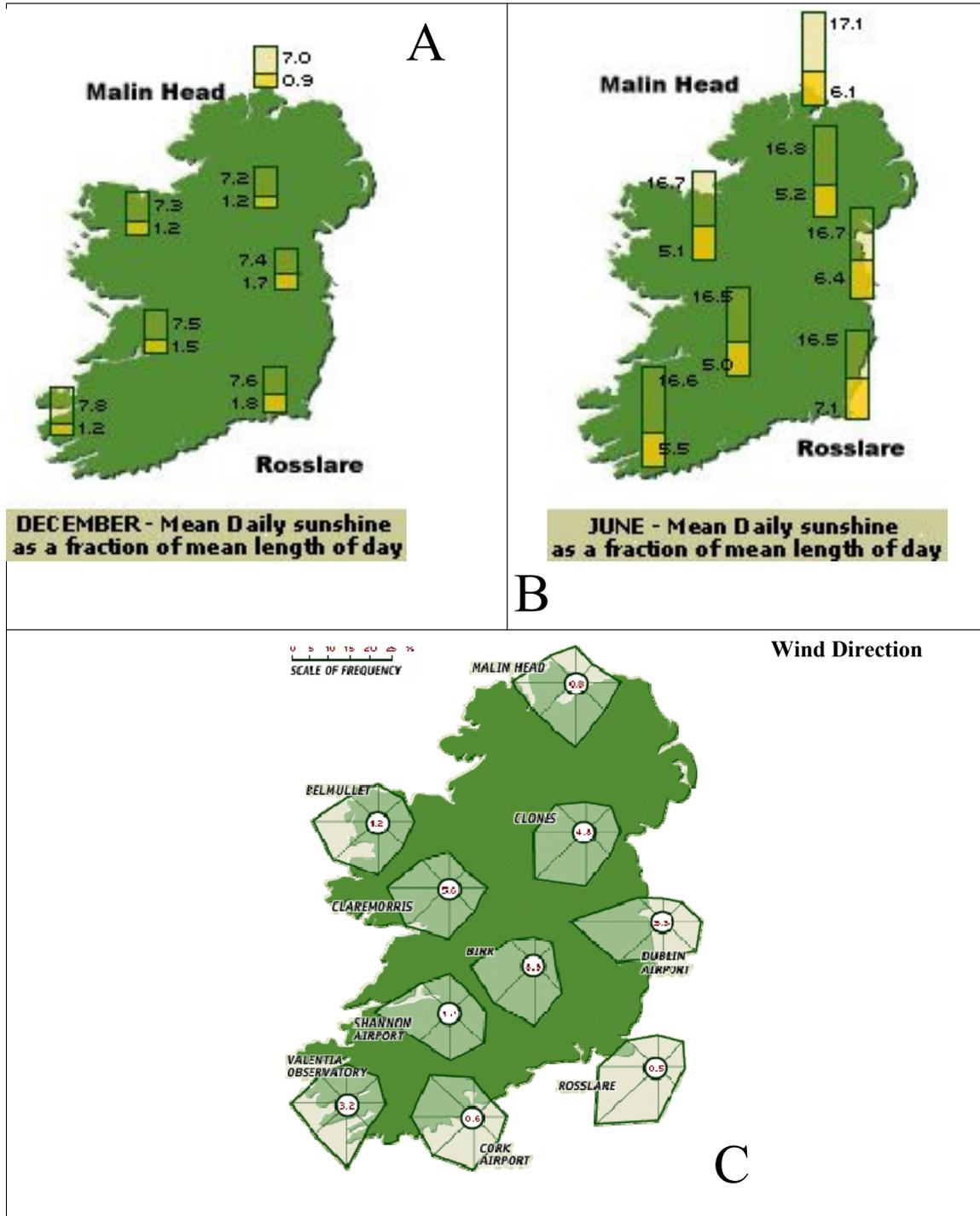
Location: _____

Land-use 2: _____

Location: _____

[8]

7. IRELAND'S CLIMATE



[Figs in A and B are in hours]

Examine these statistical maps, about Ireland's climate and answer the following:

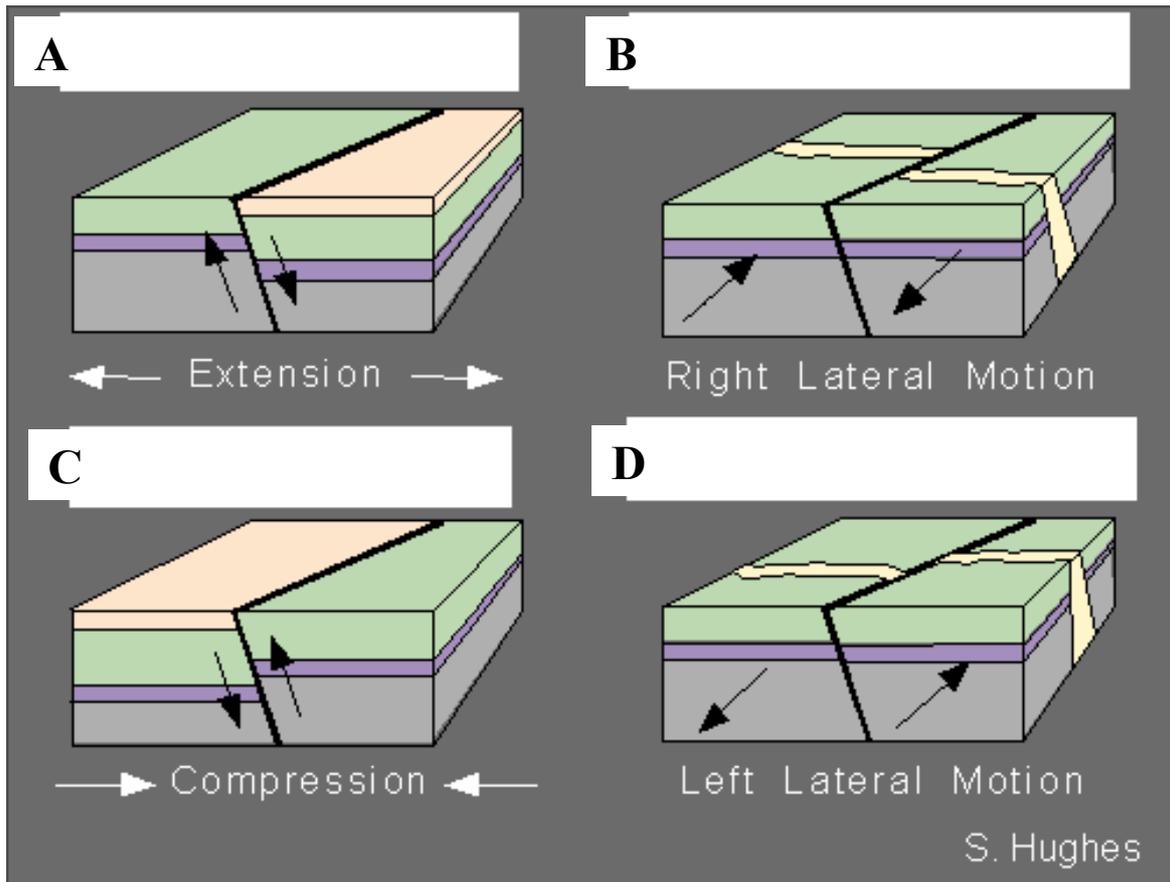
(i) Which station has the **least** sunshine in December? _____

(ii) What is the difference in sunshine in June between Rosslare and Malin Head?

(iii) What is the most frequent wind direction at:

Dublin _____ and Rosslare _____

8. Faultlines



Examine these diagrams showing four types of fault. In the space provided, write **each** of these labels in its appropriate place:

Transform [twice], Reverse, Normal

[NB: the label "Transform" needs to be inserted in two spaces].

[8]

9. Ordnance Survey Extract

Examine the Ordnance Survey extract that accompanies this paper.
The length of the runway at Galway airport is approximately:

13.5 kms 135 kms

1.35 kms 3.5 kms [tick ✓ the correct box]

[8]

10. Switzerland

Population Structure - 2005 and 2050 (est.) - Percent (%)

| Age Range (Yrs) | 2005 | 2050 (est.) |
|-----------------|------|-------------|
| 0 - 20 | 22% | 18% |
| 21 - 64 | 62% | 55% |
| 65 + | | 27% |

Examine the population data in this table.

- (i) Calculate the percentage aged 65 years and over in 2005. _____
- (ii) The total population in 2005 was 7.5 million. Calculate how many people were aged between 0 and 20 years.

- (iii) Briefly state **one** important consequence for Switzerland of the structure estimated for 2050.

[8]

11. Street Survey

| | |
|---|---------------------|
| | 3 2 3 3 3 3 2 3 3 2 |
| | 3 3 3 2 2 2 2 3 2 2 |
| | Land-use |
|  | Residential |
|  | Retail |
|  | Office |

Figures = Number of Storeys

Examine this data, from a survey of land-use in an urban street.

- (i) What percentage of buildings are residential? _____
- (ii) How many of those have three storeys? _____
- (iii) Suggest **one** further land-use category that might be found in such a street:

[8]

12. Landforms

In the space provided, match **each** of the named landforms in Column X with the description in Column Y:

Column X

| | |
|----------|---|
| Meander | A |
| Moraine | B |
| Sandspit | C |
| Scree | D |

Column Y

| | |
|----------------|---|
| Marine Action | 1 |
| Weathering | 2 |
| Fluvial Action | 3 |
| Glacial Action | 4 |

| | |
|---|--|
| A | |
| B | |
| C | |
| D | |

[8]

PART TWO – STRUCTURED and ESSAY QUESTIONS – 320 MARKS

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

- **Two** questions from **Section 1**
- **One** question from **Section 2**
- **One** question from **Section 3**

THESE QUESTIONS TO BE ANSWERED IN THE ANSWER BOOK

SECTION 1 - CORE

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

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

AND

ONE from **Regional Geography**

PATTERNS AND PROCESSES IN THE PHYSICAL ENVIRONMENT

Attempt ONE question

Question 1

A. ORDNANCE SURVEY EXTRACT

Examine the Ordnance Survey extract that accompanies this paper.

Using **graph paper**, draw a sketch-map **to half scale** of the area shown. On it, show and name **each** of the following:

- The River Corrib
- An airport runway
- An area of silting / mudbank
- A sea-ferry route

[20m]

B. LANDFORM DEVELOPMENT

Examine, with the aid of a labelled diagram or diagrams, the processes that have led to the formation of any **one** Irish landform of your choice.

[30m]

C. HUMAN INTERACTION

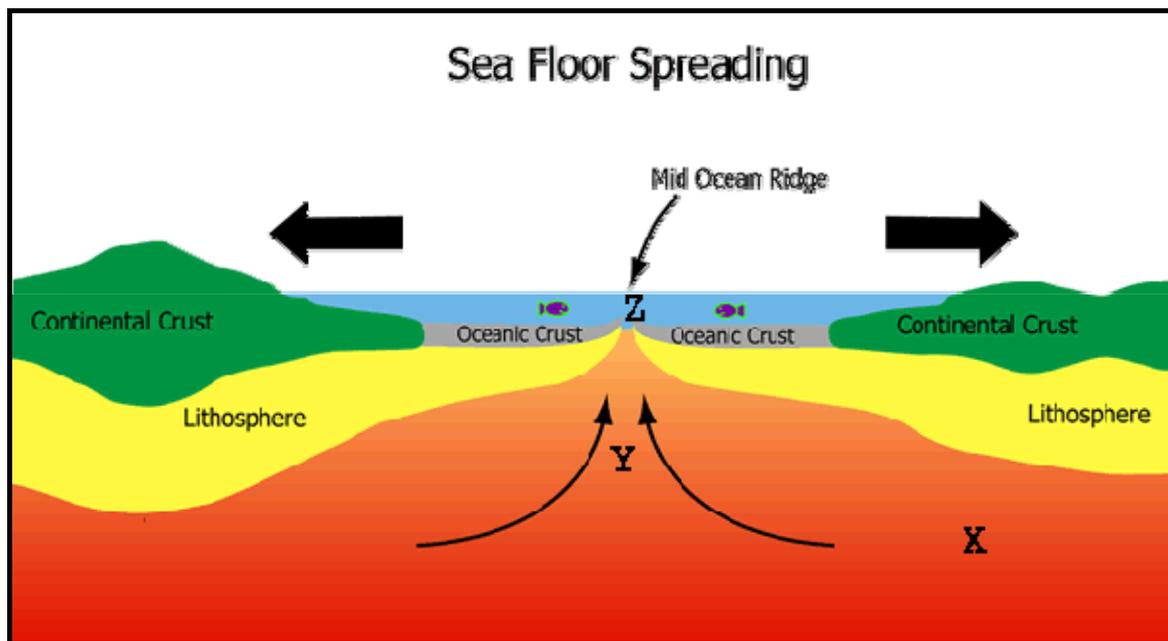
With reference to an example you have studied, describe and account for **one** way in which humans attempt to influence or control natural processes. In your answer, refer to **one** of the following:

- Fluvial processes
- Marine processes
- Mass movement

[30m]

Question 2

A. SEA FLOOR SPREADING



www.discoverourearth.org

Examine this diagram. Answer these questions in your answer book:

- (i) Name the Earth's internal layer labelled **X**.
- (ii) Name the internal process shown by the arrows at **Y**.
- (iii) Name **one** mid-ocean ridge which you have studied.
- (iv) Name the type of plate boundary shown at **Z**.

[20m]

B. VULCANICITY

Explain how the study of plate tectonics has helped us to understand the global distribution of volcanoes.

[30m]

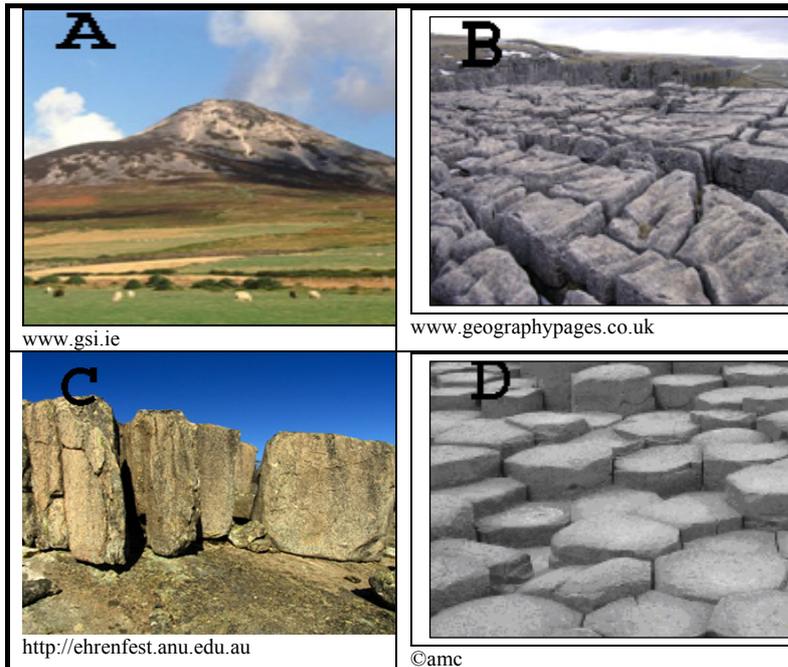
C. KARST LANDSCAPES

With reference to the Irish landscape, examine the processes which have influenced the development of any **landform** in a karst region.

[30m]

Question 3

A. ROCK TYPE



Examine these images, which show landscapes developed on **four** different rock types. In your answer book, match **each** of the rock-types below with the correct, labelled image above:

Granite

Basalt

Limestone

Quartzite

[20m]

B. ROCK TYPE AND LANDSCAPE

Examine, with reference to an example you have studied, the formation of **one** rock-type and how it produces a distinctive landscape.

[30m]

C. EARTHQUAKES

Examine, with reference to actual examples, the measurement and effects of earthquakes.

[30m]

REGIONAL GEOGRAPHY

Attempt ONE question

Question 4

A. IRISH REGIONS

In your answer book draw an outline map of Ireland. On it show and name the following:

- (i) Any **one** Irish region that you have studied.
- (ii) **One** major urban centre in the region.
- (iii) **One** major routeway in the region.
- (iv) **One** major feature of the physical landscape of the region.

[20m]

B. ECONOMIC ACTIVITIES

Examine the factors that influence the development of **one** economic activity in a **European region [not Ireland]** that you have studied.

[30m]

C. URBAN REGIONS

Describe and explain the growth of **one** major urban area in a **Continental/Sub-Continental Region** that you have studied.

[30m]

Question 5**A. ENERGY****Energy Consumption per capita in EU25 in 2004 [% of total]**

| Energy Source | % of Total Consumption |
|-------------------------|-------------------------------|
| Renewable Energy | 6% |
| Nuclear Energy | 15% |
| Solid Fuels | 18% |
| Gas | 24% |
| Oil | 37% |

Examine the data in the above table, showing the percentage of total energy by source consumed in the 25 EU member states in 2004.

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

[20m]

B. TERTIARY ACTIVITIES

Examine the development of tertiary economic activities in **an Irish region** that you have studied.

[30m]

C. CULTURE

Describe and explain the importance of culture in defining regions in a **Continental/Sub-Continental Region** that you have studied.

[30m]

Question 6

A. NON-IRISH REGIONS

In your answer book, draw an outline map of a **European Region [not Ireland] OR a Continental/Sub-Continental Region** that you have studied.

On it show and name the following:

- (i) Any **two** physical features in the region
- (ii) Any **two** large urban centres in the region.

[20m]

B. IRELAND

Examine the development of primary economic activities in **an Irish region** that you have studied.

[30m]

C. EUROPEAN UNION EXPANSION

Examine the economic and /or cultural impact of expansion on any **one member state of the EU**.

[30m]

SECTION 2 - ELECTIVES

You **MUST** attempt **ONE** question

From EITHER

- **Patterns and Processes in Economic Activities**
- OR**
- **Patterns and Processes in the Human Environment**

PATTERNS AND PROCESSES IN ECONOMIC ACTIVITIES

Attempt ONE question

Question 7

A. EU UNEMPLOYMENT RATES – JULY 2007

| | |
|-----------------------|-------------|
| Ireland | 4.7% |
| Germany | 6.4% |
| United Kingdom | 5.3% |
| Poland | 9.7% |
| France | 8.5% |

Examine the data in the table above, which shows the rate of unemployment in selected countries of the European Union in July 2007.

Using **graph paper**, draw a suitable graph to illustrate the data.

[20m]

B. ORDNANCE SURVEY EXTRACT

Study the Ordnance Survey 1:50000 extract that accompanies this paper.

Using map evidence to support your answer, explain **three** reasons why Galway has developed as a growing economic centre.

[30m]

C. DEVELOPING ECONOMIES

Examine the impact of colonisation on a developing economy you have studied and on its adjustment to globalisation.

[30m]

Question 8

A. AERIAL PHOTOGRAPH

Examine the aerial photograph of part of Galway which accompanies this paper. Using **graph paper**, draw a sketch-map **to half-scale** of the area. On it, show and name one example of each of the following land-uses:

- Education
- Industry
- Religion
- Car-park

[20m]

B. MULTI-NATIONAL COMPANIES

With reference to **one** multi-national company (MNC) which you have studied, examine how its distribution is influenced by global factors.

[30m]

C. SUSTAINABLE DEVELOPMENT

Examine, with reference to an example/examples you have studied, the importance of ensuring that development is environmentally sustainable.

[30m]

Question 9**A. ECONOMIC SECTORS**

| | Country A | Country B |
|-----------|-----------|-----------|
| Primary | 6% | 45% |
| Secondary | 24% | 30% |
| Tertiary | 70% | 25% |

Examine the data in this table. Using **graph paper**, draw a suitable graph to illustrate the data.

[20m]

B. EUROPEAN UNION POLICIES

Examine **one example** of how the policies of the European Union have influenced Ireland's economic development.

[30m]

C. GLOBAL ENERGY CONSUMPTION

Examine the economic **and** environmental significance of current major trends in global energy consumption.

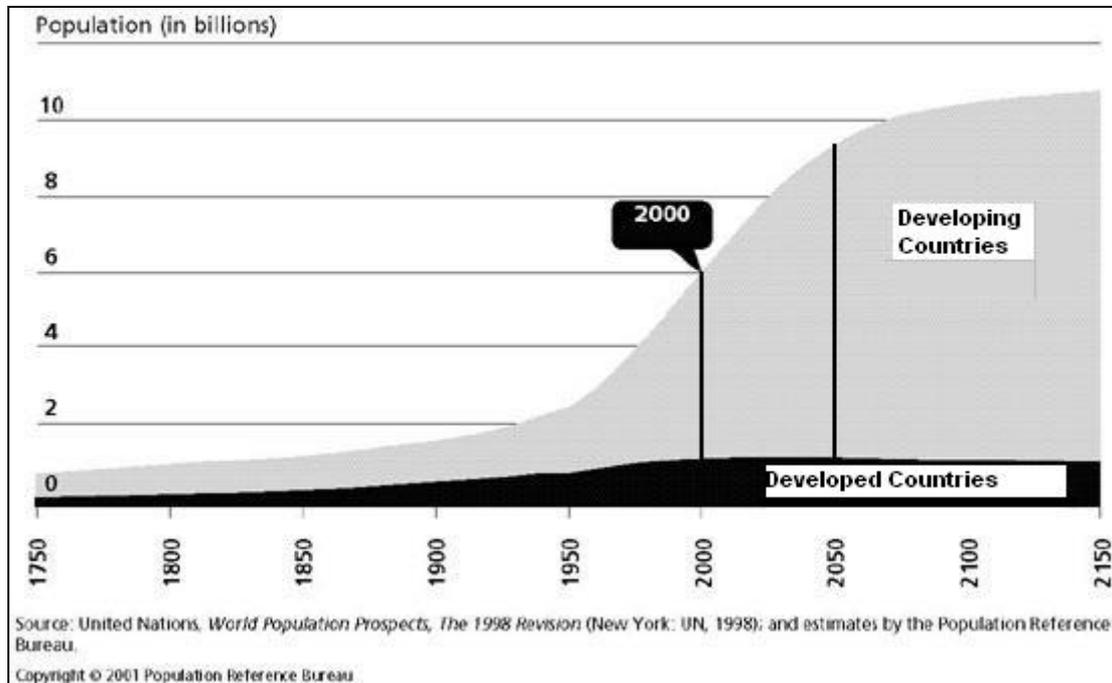
[30m]

PATTERNS AND PROCESSES IN THE HUMAN ENVIRONMENT

Attempt ONE question

Question 10

A. WORLD POPULATION GROWTH



Examine this graph of world population growth.
According to this graph:

- What was the world population total in the year 2000?
- Approximately what will it be in the year 2050?
- Briefly describe the differing trends shown for the more developed and the less developed countries (a) up to the present day and (b) in the future.

[20m]

B. URBAN FUNCTIONS

Study the aerial photograph of part of Galway that accompanies this paper.
Examine any **three** functions of the city, using evidence from the photograph to support your answer.

[30m]

C. POPULATION DENSITY AND DISTRIBUTION

Describe and explain, using examples which you have studied, the difference between the terms **population density** and **population distribution**.

[30m]

Question 11

A. AERIAL PHOTOGRAPH

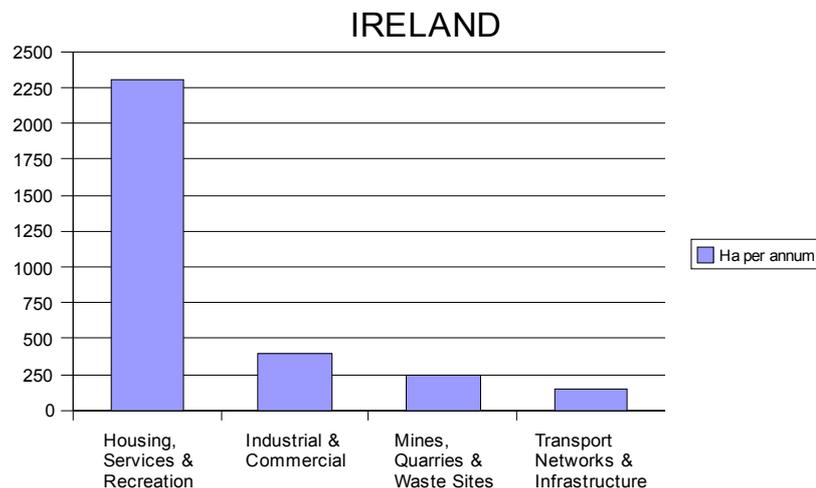
Examine the aerial photograph of part of Galway which accompanies this paper. Using **graph paper**, draw a sketch-map to **half-scale** of the area. On it, show and name the following:

- A large church
- An area of high-rise building
- An area of water-based recreation
- An example of traffic-control street marking

[20m]

B. ARTIFICIAL LAND-USE - 1990 TO 2000

Increase in Artificial Land Cover 1990-2000 (Source: EPA/EEA)



Study this graph which shows the annual increase in artificial land cover in Ireland 1990 – 2000. Describe and explain, using examples you have studied, **two** of the ways in which the landscape of Ireland is being changed by human activities.

[30m]

C. MIGRATION

Examine **one** positive and **one** negative potential consequence of human migration.

[30m]

Question 12

A. POPULATION

Examine the table of percentages below, showing the population in Ireland in 2006 classified according to age and sex.

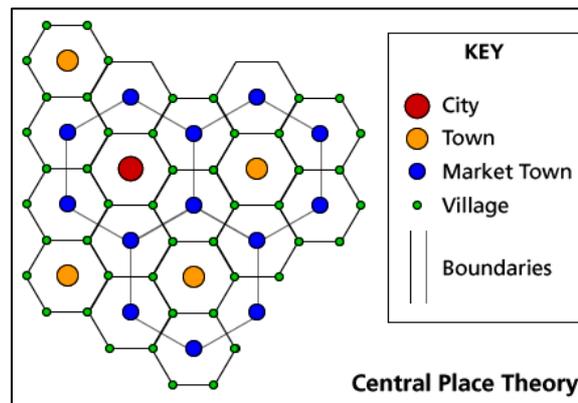
Ireland's Population by Age & Sex 2006

| Age Group | % Males | % Females |
|--------------|-------------|-------------|
| 0-14 | 21% | 20% |
| 15-24 | 15% | 15% |
| 25-44 | 32% | 31% |
| 45-64 | 22% | 22% |
| 65 + | 10% | 12% |
| Total | 100% | 100% |

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

[20m]

B. CENTRAL PLACE THEORY



wolf.readinglitho.co.uk

Examine this diagram, which refers to Christaller's Central Place Theory. Explain what you understand by this Theory.

[30m]

C. URBAN FUTURE

Examine **two** of the main problems created by the continued pace of urban growth in a region you have studied.

[30m]

SECTION 3 - OPTIONS

Attempt ONE question

N.B. It is better to treat of **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

13. Examine the impact of global trading systems on **both** producer **and** consumer regions. [80m]
14. Examine **two** of the major issues arising from the international aid debate. [80m]
15. Examine the significance of **two** of the following environmental issues in a global context: [80m]
- desertification
 - global warming
 - deforestation

Geocology

16. Examine **two** ways in which human activities have altered the natural characteristics of a biome that you have studied. [80m]
17. Examine **two** of the natural processes which influence soil formation. [80m]
18. Describe and explain the main characteristics of **one** biome that you have studied. [80m]

Culture and Identity

19. Examine the significance of **either** language **or** religion as a cultural indicator. [80m]
20. Examine, with reference to examples you have studied, the relative effectiveness of boundaries based on **both** features of the physical landscape and political decisions. [80m]
21. Examine **two** of the challenges created by international migration. [80m]

The Atmosphere-Ocean Environment

22. Describe and explain the formation of mid-latitude depressions and anticyclones – and the weather patterns associated with them. [80m]
23. Explore **one** argument in support of and **one** argument against the idea that major global climate change is currently underway. [80m]
24. Analyse and explain the interaction between the earth's atmosphere and oceans. [80m]

Blank Page