State Examinations Commission

Coimisiún na Scrúduithe Stáit
State Examinations Commission

Marking Scheme – Geography – Junior Certificate Higher Level 2006

Section 1 Folder Question
20 Questions @ 3 marks each = 60 marks

1. 3 @ 1 mark
    (i)   American Plate
    (ii)   Eurasian Plate
    (iii) The Mid Atlantic Ridge

2. 3 @ 1mark
    1 = sandstone
    2 = granite
    3 = metamorphic

3. 1 @ 3 marks
    A Landside

4. 3 @ 1mark each

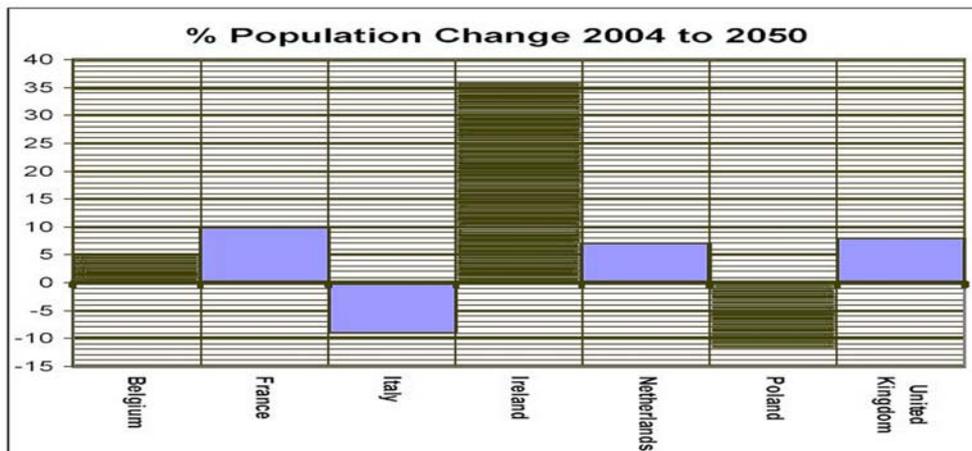 | A | 4 |
    |---|---|
    | B | 3 |
    | C | 1 |
    | D | 2 |

5. 3 @ 1 mark each
    (i)   August
    (ii) 22^0 C
    (iii) Rain Gauge

6. 3 @ 1 mark
    (i)   The north west
    (ii)   Over 17^0C
    (iii) Isotherms

7. 3 @ 1 mark
    (i)   Stage 1 (High Stationary)
    (ii)   Stage 3 (Late Expanding)
    (iii) Stage 5 (Senile)

8. 3 @ 1 mark
    (i)   45
    (ii)   Young families
    (iii) Age Sex Pyramid

9.   3 @ 1 mark

10.   3 @ 1 mark each

A	3
B	**4**
C	**1**
D	**2**

11.   3 @ 1 mark

A	**3**
B	**2**
C	**4**
D	**1**

12   1 @ 3marks

1,4,5

13A   3 @ 1 mark
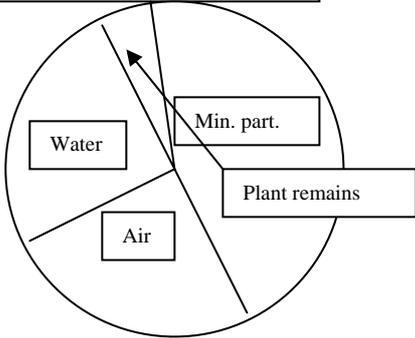 (i)   ditchers
  (ii)   millers
  (iii) sleans

OR

13B   1 @ 3 marks
Has at least twice the human population of any other city in a country.

```
14A    3 @ 1 mark
Humus
Leaching
Podzols
```

OR

```
14B    3 @ 1 mark
```

Min. part.

Water

Plant remains

Air

```
15A    3 @ 1 mark
A = 3
B = 2
C = 4
D = 1
```

OR

```
15B    1 @ 3 marks

Convectional rainfall
```

16.   1 @ 3marks

   1,3 4

17.   3 @ 1mark
   Ireland = over 2,900
   Brazil = 2,300 – 2,599
   Mali = under 2,300

18.   3 @ 1 mark each

X	Y
A	**4**
B	3
C	**1**
D	**2**

19.   3 @ 1 mark

A	2
B	**4**
C	**1**
D	**3**

20   1 @ 3 marks
        19 square kilometres

<table>
<tr><td>Draw a small
grid to Total
Marks for each
Question</td></tr>
</table>

→

Mk	X	**Q**s	=	**T**otal
3	X	11	=	33
2	X	6	=	12
1	X	2	=	2
0	X	1	=	0
		20	=	47

Please enter the folder total mark on the top right corner of the first page of the candidate's script.
When entering the mark on the front grid enter it as **F = 47** as per example above.

Question 1. WEATHER, TOURISM AND INDUSTRIAL ACTIVITIES

A **Irish Weather**
The **weather chart** shows a large cyclone or depression over Ireland.

(i) Name **each** of the features labeled **A, B** and **C** on the chart.

Three features @ 1 mark each

A = Warm Front, **B** = Cold Front **C** = Isobar

(ii) Describe the weather conditions, which you would expect to find in the area labeled X on the chart. Refer briefly in your answer to atmospheric pressure, cloud and precipitation.

(9)

Three descriptions @ 2 marks each

Suggested answer.
The weather is showery with drizzle

There is broken cloud with sunny spells

Pressure is low between 1000 1008 mbs.

Question 1.(continued)

B. **Climate and Tourism**

"Climate helps to make some parts of Europe attractive to tourists".
Explain this statement, referring to **one** European country or region which you have studied.

Named country/region @ 2 marks

 Suggested answer.

France /Riviera/ Spain / Portugal /Algarve/ Italy /Albania/Greece/Canaries/Switzerland

(11)

Three explanations @ 3 marks each (St. 2mks + Dev 1mks)

 Suggested answer.

A regions with a Mediterranean climate have hot dry summers, which suits people

from Northern Europe who like sun bathing.

The Algarve has higher temperatures in the summer than Ireland

There are more hours sunshine in Spain

Longer periods of sunshine in Summer in Lanzarote than in Dublin, which tourists

prefer in order to relax at beaches/ sunbathe.

Question 1.(continued)

C. **Acid Rain**

(i)   Explain how industrial activities can cause acid rain.

Two explanations @ 2 marks each (St. 1 mks + Dev. 1 mks)

Suggested answer.

Industrial regions have power stations, which burn fossil fuels, which produce sulphur dioxide and nitrogen oxides, which become acid when mixed with rain.

Iron and steel works produce huge amounts of toxic gases, which turn to acid rain.

(ii)   The area labelled **X** on the map is lightly populated and is not heavily industrialised.

Suggest then why the area labelled **X** suffers from high levels of acid rain.

Two suggestions @ 3 marks each (St. 2mks + Dev 1 mk)

(10)

Suggested answer.

Region X is situated close to industrial regions in Germany, Poland, and Belgium.

The prevailing winds are coming from the south west bringing rain across industrial regions towards the region X.

Question 2. NATURAL RESOURCES, PROCESSES AND PEOPLE.

A. **Weathering in the Burren.**

(i) **Name** the type of rock which occurs in the area shown.

Name @ 2 marks

Suggested answer.
Limestone

(ii) **Describe** fully the type of weathering that takes place in the area shown.

(8)

Two descriptions @ 3marks (st 2mks + Dev 1 mk.)

Suggested answer.
Rainwater absorbs carbon dioxide to form a weak solution of carbonic acid.

Rain dissolves rock because it is a weak acid which can dissolve the calcium carbonate in the limestone forming clints and grikes..

Limestone is a permeable rock because it has lines of weakness called joints and bedding planes.

Rain can dissolve the calcium carbonate in the limestone forming clints and grikes.

Chemical weathering takes place as rain dissolves limestone.

Question 2.(continued)

B.   Hydro Electric Scheme

(i)   Name **one** economic benefit **and one** environmental benefit of hydroelectricity.

Two benefits @ 2mks (one economic + one environmental)

Suggested answer.

Clean source of power – no pollution to the atmosphere

Building a power station provides plenty of jobs

Flooding on river can be controlled

Artificial lake can be used for recreation sports

HEP reduces the need to import expensive fossil fuels.

(ii)   Outline **two** objections which might be made to the development of a
         hydroelectric scheme such as the one shown.

(10)

Two objections @ 3 marks (St 2mks + Dev 1mk)

 Suggested answer.

Dams destroy plant and animal habitats e.g. salmon cannot return upstream

Farmland is flooded forcing people to move.

Visual pollution – not blending into the landscape.

Question 2.(continued)

C.   Depletion of a natural resource.

(i)   To what extent does the table of figures show that fish stocks have been
depleted over time in the seas off Ireland?

One description @ 3marks (St 2mk + Dev 1mk)

Suggested answer.
Between 1970 and 1998 there has been a huge decline in fish stocks from 26,700

tonnes to 6,600 tonnes.

(ii)   Describe **three** reasons for the depletion of fish stocks in Irish waters.

(12)

Three reasons @ 3 marks (St 2mks + Dev 1mk)

Suggested answer.

More efficient boats with radar and/or sonar equipment make it more difficult for fish

to escape.

Factory ships fish for months, and vast sea areas are cleared of fish.

In the 1960/70's as boats became larger and with the improvements in technology,

catches became bigger which led to over fishing and stocks were wiped out. There

have been an increased numbers of foreign factory ships.

Question 3. INEQUALITIES

A.   **Life expectancy and child mortality rates**.
Judging by the information given in the graphs above:

(i)   Which of the countries named is the most developed?

Name of Country = 1marks

Suggested answer.

Belgium

(ii)   Which of the countries named is the least developed?

Name of Country = 1marks

Suggested answer.

India

(iii)   Give **two** reasons why life expectancy is higher in countries of The First World
(The North) than it is in countries of The Third World (The South).   (8)

Two reasons @ 3 marks (St 2mks + Dev 1mk)

Suggested answer.
There are better health services e.g. more doctors per 1000 of population.

People are better educated and understand better the importance of hygiene.

The quantity and quality of food is better therefore malnutrition is not a problem.

People living in the Third World have poorer diets than those in the First World and

this leaves them unable to fight disease causing them to die at an earlier age.

War has caused a shorter life expectancy in Third World countries such as Somalia as

people die due to fighting and poverty caused by war.

Question 3.(continued)

B.   **Cities of the South**

Examine the line graphs, which show population growth in three large Third World cities:

(i)   Rank these cities 1, 2 and 3 according to their rate of population growth. (Rank the city with the most rapid population growth as 1).

Ranking correct = 2 marks

Suggested answer.

1 = Bombay. 2 = Calcutta. 3 = Buenos Aires

(ii)   In which year did Bombay overtake Buenos Aires in population?

Name of year = 3 marks

Suggested answer.

1998

(iii)   In the case of **any one** Third World city which you have studied, describe **two** problems resulting from rapid population growth.   (12)

Name of city @ 1mark

Suggested answer.

Calcutta

Two problems @ 3 marks (St 2mks + Dev 1mks)

Suggested answer.

In Calcutta bustee dwellers live in temporary huts made from pieces of timber, canvas, plastic sheeting. Huts are shared, Pavement people, half million, no dwellings.

Shortage of clean water- pumps breaks down leaving dwellers without water for long periods.

Lack of sanitation – due to shortage of clean water –therefore there is widespread disease.

A lot of crime – due to high level of poverty – and unemployment.

Question 3.(continued)

C.   **Inequalities within European states.**

(i)   Name **two** poorer regions shown on the map.

Two names @ 2marks

Suggested answer.
West of Ireland / N.W. Spain / N. Portugal / Massif Central / Mezzogiorno / S. Italy

(ii)   In the case of **one** of the named poorer regions, describe **two** reasons why it is poor.

(10)

Two reasons @ 3 marks (St 2mks + Dev 1 mk)

Suggested answer.
Southern Italy is very far away from the rich core regions e.g. Paris basin, Netherlands etc. This makes transport costs high.

Land is mountainous and unsuited to commercial farming because of steep slopes and poor soil.

Young educated people migrate from Western Ireland to richer areas thus making the West less attractive for investors and wealthier areas benefit.

Question 4.   GEOGRAPHICAL MIX

Answer **ANY THREE** of the following **A, B, C, D**

Mark all answers attempted by candidates, but credit marks for the best **three** only. Square bracket the surplus question.

A.   The growth of cities.

(i)   With reference to one or both of the maps:

• Suggest **one** reason for the rapid growth of Dublin at the place labelled **X**.

• Suggest **one** reason for the less rapid development of Dublin at the place labelled **Y**.

Two reasons @ 2 marks

Suggested answer.
X is close to a national primary route e.g. N11. Close to the port of Dun Laoighaire.

Y is at a hilly area over 300M which makes the development of infrastructure difficult.

(ii)   Describe **two** economic reasons for the growth of **any one** Irish city which you have studied.

(10)

Two reasons described @ 3 marks each (St 2mks + Dev 1mk)

Suggested answer.

Dublin- Main focus of transport routes by road and rail to rest of country.
Irelands busiest sea port/airport located in Dublin- importing raw materials and exporting finished goods.

Irelands leading center of manufacturing.

Chief commercial city- busiest shopping centers, dept stores, headquarters of many banks and commercial firms,

Question 4.(continued)
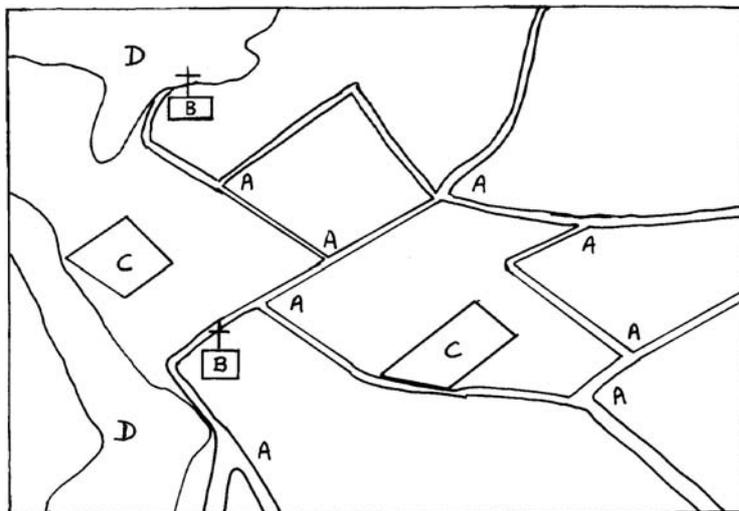
B.   Aerial Photograph

Study the aerial photograph of Killarney provided.
Draw a sketch map of the area shown on the photograph.
On your sketch map **show and name** the following:

- **Two** connecting streets.

- A large car park

- A church

- A large area of deciduous woodland.

(10)

Four features @ 2 mks
Frame of map @ 2mks (Shape 1mk + orientation 1 mk)

A = Connecting roads
B = Church
C = Large car park
D = Deciduous Woodland

C.   Factors which affect climate.
   (i)   State which of the two places, A or B, has warmer summers and colder winters
             and explain why.

Location = 2marks
One explanation @ 4marks (St 2mks + Dev 2mks)

Suggested answer.
Location = B

Location B is further from the sea than A. These winds keep summers from getting too

warm and winters too cold the nearer you are to the sea.

   (ii)   Explain how the prevailing wind labelled **X** would affect the climate of the lands
             over which it blows.   (10)

One explanation @ 4marks (St 2mks + Dev 2mks)

Suggested answer.
This wind is coming from the North (Polar Wind) therefore it would make the climate

colder. As it moves south it will get warmer picking up moisture therefore producing

little precipitation.

Question 4.(continued)

D.   Human Migration.

(i)   Explain the meanings of **each** of the following terms, which relate to human migration:
• Push factors of migration • Pull factors of migration • Barriers to migration

Three explanations @ 2 marks
Suggested answer.

(ii)   Identify **one** example of a **push factor**, **one** example of a **pull factor** and **one** example of a **barrier** to migration, each of which is mentioned in the passage above.

Three examples @ 1 mark each

Suggested answer.
Push: Barely enough food to eat

Barrier: Raising the fare / leaving ageing parents

Pull: Prospect of a job.

(iii)   Name one other barrier to migration, which is not mentioned in the passage.

(10)

One barrier @ 1 mark

Suggested answer.
Brid may only speak Irish / Visa problem / fear of the unknown

Question 5. ORDNANCE SURVEY MAP AND AERIAL PHOTOGRAPH

A. What is the direction from Brown Isd. (V 923 897) to Cow Isd. (V 955 874) on the O.S. map?

(3)

Correct direction = 3 marks

Suggested answer.

   South East

B. Explain why there is little or no settlement at **each** of the following places on the **O. S. map**:

   • At V 89 88
   • At V 961 891   (6)

Two explanations @ 3 marks (St 2mks + Dev 1mk)

Suggested answer.
At V 89 88 The land is North facing getting less sun. Land is very steep making the development of roads difficult.
At V961 891 : The land is near a meandering river and is liable to flood.

C. Referring to the **O.S. map** explain **two** different reasons why Killarney and its surrounding countryside is a popular tourist area.   (12)

Two reasons @ 6 marks (St 2mks + Dev 2mks + ref to O.S. map 2mks)

Suggested answer.
Killarney is next to a large lake Lough Leane suitable for boating and angling.

Suitable area for sport e.g. a golf course at V926915.

Forests for walking and exploring e.g Forestry at Muckross V956 865

Historical features e.g. Ogham Stone at V879 908 / Ross Castle at V 949 887

Question 5.(continued)

D.   Examine the **aerial photograph**. Imagine that it was proposed to build a computer factory in the field on the extreme right background of the photograph. Do you think that this is a suitable area for such a factory? Give **two** arguments to support your answer.

Refer to the photograph in your arguments.   (9)

Opinion = 1mark

Two arguments @ 4 marks (St 2mks + Dev 2mks)

Suggested answer.

Yes or No (justified)

For: Two roads suitable for transport of raw materials and finished product.

Housing estates nearby would supply the labour force.

Against: Local residents would object to increased traffic congestion because roads look too narrow.

More land lost to factories would hinder the tourist industry.

SUMMARY MARKING SCHEME 2006

Q.1. WEATHER, TOURISM AND INDUSTRIAL ACTIVITIES
A. (i) **Three features** @ 1 mark each
   (ii) **Three descriptions** @ 2 marks each
B. (i) **Named country/region** @ 2 marks
   (ii) **Three explanations** @ 3 marks each (St. 2mks + Dev 1mks)
C. (i) **Two explanations** @ 2 marks each (St. 1 mks + Dev. 1 mks)
   (ii) **Two suggestions** @ 3 marks each (St. 2mks + Dev 1 mk)

Q.2. NATURAL RESOURCES, PROCESSES AND PEOPLE.
A. (i) **Name** @ 2 marks
   (ii) **Two descriptions** @ 3marks (St 2mks + Dev 1 mk.)
B. (i) **Two benefits** @ 2mks (one economic + one environmental)
   (ii) **Two objections** @ 3 marks (St 2mks + Dev 1mk)
C. (i) **One description** @ 3marks (St 2mk + Dev 1mk)
   (ii) **Three reasons** @ 3 marks (St 2mks + Dev 1mk)

Q. 3. INEQUALITIES
A. (i) **Name of Country** = 1mark
   (ii) **Name of Country** = 1mark
   (iii) **Two reasons** @ 3 marks (St 2mks + Dev 1mk)
B. (i) **Ranking correct** = 2 marks
   (ii) **Name of year** = 3 marks
   (iii) **Named city** = 1mark
       Two problems @ 3 marks (St 2mks + Dev 1mks)
C. (i) **Two names** @ 2marks
   (ii) **Two reasons** @ 3 marks (St 2mks + Dev 1 mk)

Q. 4. GEOGRAPHICAL MIX
Answer **ANY THREE** of the following **A, B, C, D**
A. (i) **Two reasons** @ 2 marks
   (ii) **Two reasons described** @ 3 marks each (St 2mks + Dev 1mk)
B. **Four features** @ 2 mks
   Frame of map @ 2mks (Shape 1mk + orientation 1 mk)
C. (i) **Location** = 2marks
   (ii) **One explanation** @ 4marks (St 2mks + 2mks)
   (iii) **One explanation** @ 4marks (St 2mks + 2mks)
D. (i) **Three explanations** @ 2 marks
   (ii) **Three examples** @ 1 mark each
   (iii) **One barrier** @ 1 mark

Q.5. ORDNANCE SURVEY MAP AND AERIAL PHOTOGRAPH
A. **Correct direction** = 3 marks
B. **Two explanations** @ 3 marks (St 2mks + Dev 1mk)
C. **Two reasons** @ 6 marks (St 2mks + Dev 2mks + ref to O.S. map 2mks)
D. **Opinion** = 1mark
   Two arguments @ 4 marks (St 2mks + Dev 2mks)

FOLDER SUMMARY MARK SHEET

1.	American, Eurasian, Mid Atlantic Ridge	1+1+1
2.	Sandstone, Granite, Metamorphic	1+1+1
3.	Landslide	3
4.	A4, B3, C1, D2	1+1+1
5.	August, 22º C, Rain gauge,	1+1+1
6.	North West, Over 17º C, Isotherms	1+1+1
7.	High Stationary/Stage1, Late Expanding/Stage3, Senile/Stage5	1+1+1
8.	45, Young Families, Age-Sex Pyramid	1+1+1
9.	Each country correctly drawn	1+1+1
10.	A3, B4, C1, D2	1+1+1
11.	A3, B2, C4, D1	1+1+1
12.	1,4,5	3
13.	Ditchers, Millers, Sleans	1+1+1
	or, Has at least twice the human population	3
14.	Humus, Leaching, Podzols	1+1+1
	or, Diagram correctly labelled	1+1+1
15.	A3, B2, C4, D1	1+1+1
	or, Convectional	3
16.	1,3,4	3
17.	Over 2,900, 2,300-2,599, Under 2,300	1+1+1
18.	A4, B3, C1, D2	1+1+1
19.	A2, B4, C1, D3	1+1+1
20.	19 km²	3