Coimisiún na Scrúduithe Stáit
State Examinations Commission

Junior Certificate 2011

Marking Scheme

Geography

Ordinary Level

Section 1 Folder

Question	Answer	Mark	Notes
1	Lava	3	
2	Fold mountain	3	
3	Granite	3	
4	Clint	3	
5	Landslide	3	
6	Waterfall	3	
7A	Longshore drift	3	Credit one correct answer only
OR 7B	Fiord	3	
8A	2nd option	3	Credit one correct answer only
OR 8B	An Anemometer	3	
9A	South West to North East	3	Credit one correct answer only
OR 9B	2.8 kms	3	
10A	3%	3	Credit one correct answer only
OR 10B	Poor living conditions	3	
11	Greatest at Y	3	
12	Hot Desert	3	
13	Gas Rig	3	
14	Sports ground – south east – Ceannt Station	1+1+1	
15	3rd option	3	
16	Right Foreground	3	
17	Nucleated	3	
18	Post Office	3	
19	Q 46 00	3	
20	4th option	3	
Maximum Score Possible 60 marks			

SECTION 2 (90 MARKS)

Answer any **THREE** questions.
All questions carry equal marks.

Question 1. PHYSICAL GEOGRAPHY

A. Rocks

(i) Name **ONE** rock you have studied and state if it is Igneous **or** Sedimentary **or** Metamorphic.

(ii) Describe how the rock you have chosen in part (i) above was formed.

(iii) Give **TWO** reasons why people might object to a quarry being opened near their home.

[10]

(i) Rock named = 2m
Group stated = 2m

2 + 2 = 4

Sample:*Limestone* (2), *a sedimentary rock* (2); *Granite* (2) , *an igneous rock* (2) *Marble* (2)*, a metamorphic rock* (2).

(ii) Three points of description of Formation = 1m + 1m + 1m

1 + 1 + 1 = 3

Sample: *The shells of fish* (1) *fell* (1) *to the bottom of the sea* (1).
Liquid rock (1) *poured* (1) *from a volcano* (1) *and cooled* [1].
A rock was changed (1) *by pressure* (1) *or heat* (1) *e.g. limestone to marble* [1]).

(iii) Two reasons for objections stated = 2m Reason One and 1m Reason Two

2 + 1 = 3

Sample: *They don't like the noise* (2) *or the dust* (1).

Question 1 PHYSICAL GEOGRAPHY

B. Landforms

(i) Name **ONE** feature formed by ice **or** the sea.

(ii) Draw a diagram of the feature you have named.

(iii) Explain how this feature was formed.

[8]

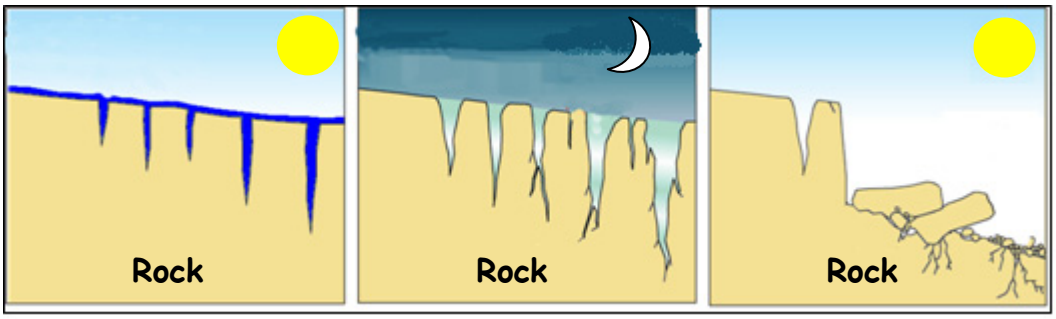
(i) Feature named = 2m
(ii) Diagram = 3m gr. (1 + 1 + 1)
(iii) Formation = 3m (three elements of info. @ 1 + 1 + 1)
2 and 1 + 1 + 1 and 1 + 1 + 1 = 8

Sample: (i) *Beach* (2) (ii) *Diagram with 3 elements* (3)
(iii) *Sand* (1) *is dropped* (1) *by waves* (1).

(i) U-shaped valley (2) *(ii)* Diagram *with 3 elements* (3)
(iii) A glacier(1) *eroded* (1) *this during the ice-age* (1).

Note: **A well-annotated diagram can get full marks.**

C. Weathering



(i) Use the diagrams above to explain how rocks are weathered by freeze-thaw (frost shattering).

(ii) Explain why freeze-thaw (frost shattering) is more likely to occur on mountains rather than on lowland. [12]

(i) Five elements of information @ 2m each = 10
(ii) **One** point of information @ 2m .
2 + 2 + 2 + 2 + 2
and 2 = 12

Sample: (i) *Water gathers in cracks* (2). *By night it freezes* (2). *It turns to ice and expands* (2). *The crack widens* (2) *after a while* (2) *and pieces break off* [2].

Note: **At least one point MUST refer to EACH segment of the diagram.**

(ii) Temperature is lower on mountains (2) *so there is more frost* [2].

Question 2. ORDNANCE SURVEY MAP

A. Study the Ordnance Survey map and legend provided.

Draw a sketch map of the area shown on the Ordnance Survey map.

On your sketch map **show and label** each of the following:

- The Coastline
- The built up area of Dingle/An Daingean
- The Milltown River (in the west of the area shown)
- The N86 National Secondary Road.

[10]

Feature	Marked In	Identified	
Coastline	1	1	Frame must have four sides drawn and have correct proportion i.e. Landscape.
Built-up Area	1	1	
Milltown River (W)	1	1	
N86	1	1	
Frame	1 (four sides) + 1 (proportion)		
Total	10		

Note: **If tracing is presented mark as above, divide by two rounding upwards to nearest whole number e.g. 7/2 = 3 ½ round to 4.**
If substantial part of the area is NOT included in sketch apply same procedure.

B. (i) Using the Ordnance Survey map, explain **TWO** reasons why the town developed at this location.

(i) Two reasons @ 3m each.
Each reason stated = 2m, dev. +1m

2 + 1 and 2 + 1 = 6

Sample: *It has many roads* (2) *e.g. R549* (1); *it is on the coast* (2) *for tourism* (1); *It is on a harbour* (2) *for fishing* (1); *it is built on lowland* (2) (+ 0). *It is sheltered* (2) *by the mountains* (1);

(ii) Using the Ordnance Survey map, explain why there are so few roads and houses around **Q 51 05**.

[10]

(ii) Two elements of information @ 2m + 2m .
Either
One reason stated = 2, and dev. + 2
Or
Two distinct points @ 2 + 2.

2 + 2 = 4

Sample: *The land is too steep* (2) *and roads would be too expensive to build* (2).
There are high mountains (2) *and a lake* (2).
The contours are very close (2) *so the land is too steep* (2).

Question 2. ORDNANCE SURVEY MAP

C. Imagine you are on holiday in Dingle/An Daingean and you are writing a letter or sending an email to a friend.

Using evidence from the Ordnance Survey map, describe **FOUR** attractions Dingle/An Daingean and the area around it have for tourists.

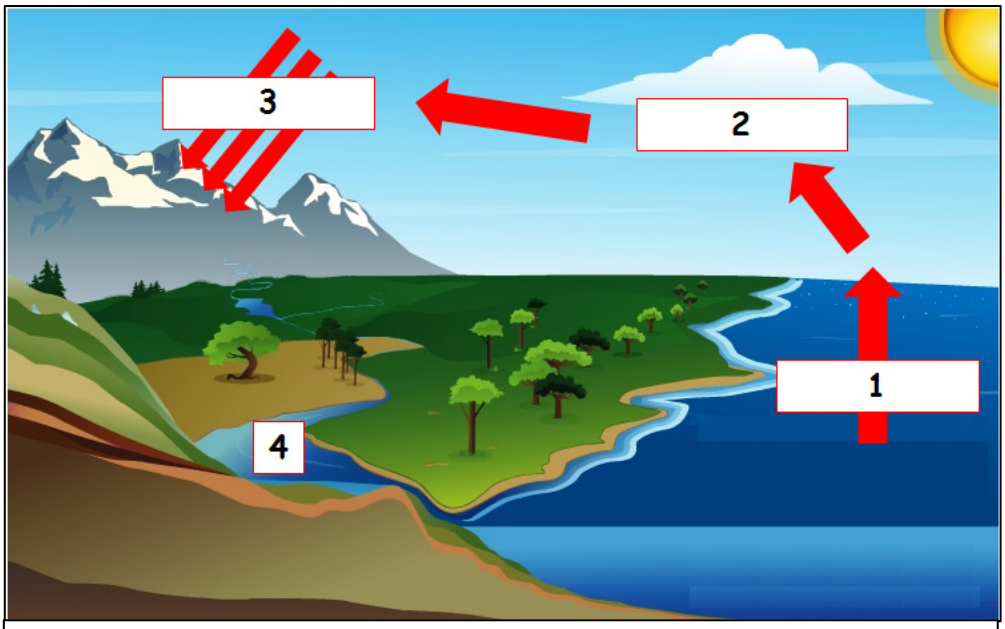
[10]

Expect Four attractions: @ 2 + 1, 2 + 1, 1 + 1 and 1 + 1.
Two attractions stated @ 2m + 1m dev/reference
AND
Two attractions stated @ statement 1m, dev/map ref. +1
Expect map reference (specific or inferred) with each attraction. Attraction may be activity or landform.
2 + 1 and 2 +1 AND 1 + 1 and 1 + 1 = 10

Sample: *It is great for swimming* (2) *on Tra Beg* (1) *or climbing* (2) *on Connor Hill* (1). *You could go sailing in Dingle Harbour* (1 + 1) *and fishing* (1).
Or
[*There is lovely scenery* (2) *such as the mountains* (1).
There are ancient monuments everywhere (2 + 0). = 5]

Question 3. ECONOMIC ACTIVITIES

A. Natural Resource



Condensation Surface Run Off
Precipitation Evaporation

(i) Explain the Water Cycle, using the diagram and terms above.

(i) Six points of information/explanation @ 1m each awarded as follows:
For each of the FOUR terms correctly identified: 1m each
Development points to max. of 3m. (1 + 1 + 1)

1 + 1 + 1 + 1 + 1 + 1 = 6

Sample: *1 = Evaporation, 2 = Condensation, 3 = Precipitation, 4 = Run-off* = 4m.
Or
After evaporation (1) the air rises (1) *and cools* (1). *Precipitation* (1) *could be rain* (1) and *run-off* (1) *brings water back to the sea* [1]. = 6m.

Accept terms given in sequence for four marks
Max. without terms = 3m. (i.e. written account with no mention of terms).

(ii) Name **TWO** ways people use water.

(iii) Explain **ONE** way people pollute water supplies.

[10]

(ii) Two uses @ 1m + 1m

(iii) One way people pollute explained @ 2m
Way stated = 1m , development +1

(ii) 1 + 1 and (iii) 1 + 1 = 4

Sample: (i) *Washing* (1) *and drinking* (1); *irrigation* [1] *and power* [1].

(ii) *They pollute rivers* (1) *with sewage* (1). *Waste from factories* [1]
can pollute lakes [1]. *Silage waste* [1] *damages streams* [1].

Question 3. ECONOMIC ACTIVITIES

B. Manufacturing Industries

Manufacturing industries provide jobs for many people in Ireland.
All these industries have inputs, processes and outputs.

(i) Name **ONE** factory you have studied.

(ii) List **TWO** inputs, **TWO** processes and **TWO** outputs of that factory.

(i) Factory named = 2m
(ii) Two inputs, processes and outputs @ 1m for each of six.
(i) 2 and (ii) 1 + 1 and 1 + 1 and 1 + 1 = 8

Sample: (i) *The factory is Brennan's Bakery.* (2).
(ii) *Inputs are flour* (1) *and oil* (1); *processes are mixing* (1) *and baking* (1) *and outputs are bread* (1) *and rolls* (1).

(iii) Explain the meaning of Footloose industry.

(iii) Two elements of explanation @ 1m + 1m.
1 + 1 = 2

[10]

Sample: *This is an industry that can easily move* (1) *like computers* (1).
It is not tied [1] *to one place* [1] *like near a coalfield* [1].

Question 3. ECONOMIC ACTIVITIES

C. Resources and Technology

Transporting the peat

Selling the peat

Collecting the peat

Harvesting the peat

Examine the photographs above.

They show different stages in the extraction and removal of peat from bogs.

(i) Describe how different machines (technology) have increased the amount of peat that is extracted and removed.

(i) Six elements of information @ 1m each **1 + 1 + 1 + 1 + 1 + 1 = 6**

Sample:*Trains* (1) *carry huge loads across the bog* (1). *Peat is milled* (1) *and made into briquettes* (1). *Huge machines harvest the turf* (1) *faster than by hand* (1).

Note: Ditcher = drains; Grader = levels; Miller = scrapes/shreds; Harrow = turns; Ridger = ridges!; Harvester = harvests!; Tractor; Train.

(ii) Name and explain **ONE** possible use of bogs after the peat has been removed. [10]

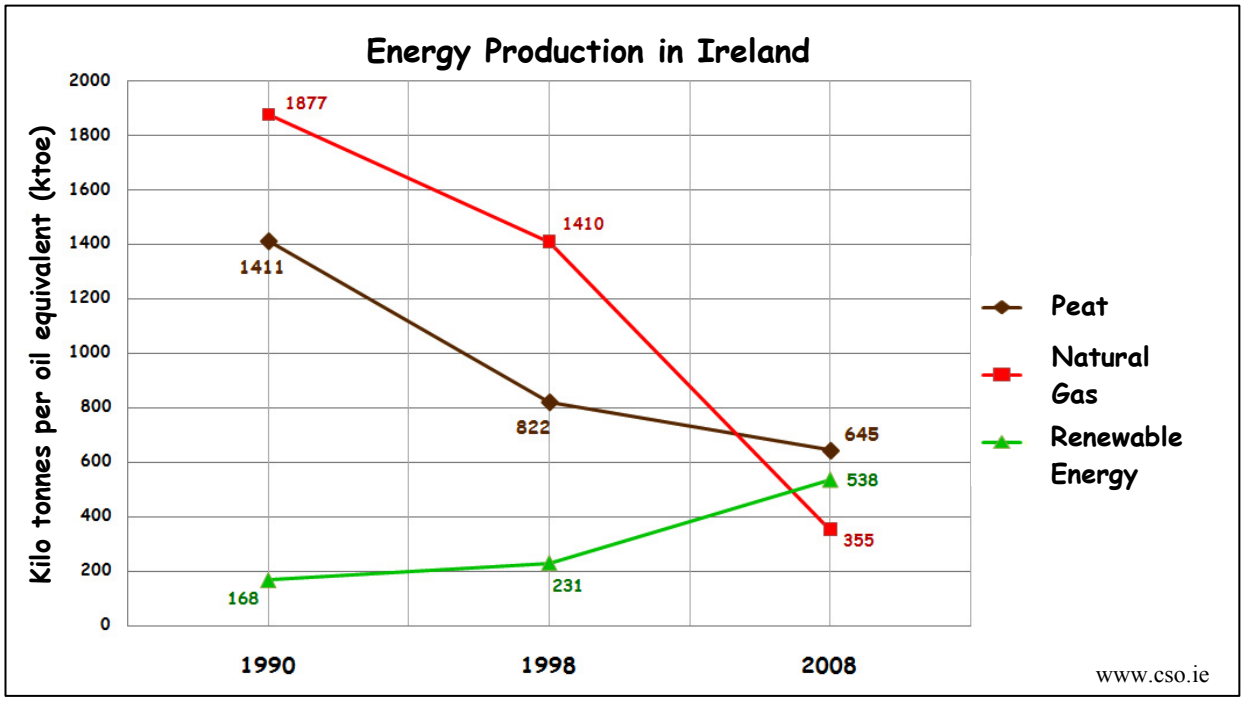
(ii) Use named = 2m, dev, + 2 **2 + 2 = 4**

Sample: *They can be preserved as wetlands* (2) *for wildlife* (2).
You could put up wind mills [2] *as they are very flat* [2].
You could plant trees [2 + 0].

Question 4. A GEOGRAPHICAL MIX

Answer **ANY THREE** of the questions **4A**, **4B**, **4C**, **4D**.

4A. STATISTICAL DIAGRAMS



The graph above shows energy production in Ireland for three selected years.

(i) Which year had the highest natural gas production?

(ii) Which year had the lowest natural gas production?

(iii) Which form of energy increased in production between 1990 and 2008?

(iv) Name **TWO** examples of renewable energy.

[10]

(i) 1990 = 2m; (ii) 2008 = 2m; (iii) Renewable Energy = 2m.

(iv) Two examples of renewable energy @ 2m each (2 + 2)

2 + 2 + 2 and 2 + 2 = 10

Sample: (iv) *Wind* (2) *Solar* (2) *Wave* [2] *Biomass* [2] *Hydro* [2]

Question 4. A GEOGRAPHICAL MIX

4B. PROTECTING THE ENVIRONMENT

(i) Explain **ONE** cause and **ONE** effect of Acid Rain.

(ii) Describe **TWO** ways that schools can help reduce climate change and global warming.

[10]

(i) One cause named = 2m, dev. + 1
One effect named = 2m, dev. + 1.

(ii) Two ways described @ 2m divided as follows:
Way stated = 1m, dev + 1

(i) 2 + 1 and 2 + 1; (ii) 1 + 1 and 1 + 1 = 10

Sample: (i) Cause :*Burning Fossil Fuels* (2) *in factories* (1);
Burning coal [2] *to heat houses* [1];

Effect: *Rivers are poisoned* (2) *and fish die* (1)
Crops are damaged [2] *and people could starve* [1].
Lakes all died [2] *in Sweden* [1].

Note: Causes could be source (factory) or chemical compounds (SO2) or activity (burning coal).
Damage could be to vegetation, fauna, soil, water, buildings, humans.

Sample: (ii) *Recycle* (1) *glass* (1); *turn off lights* (1) *use long-life bulbs* (1);
[Reduce energy use and/or raise awareness]

Question 4. A GEOGRAPHICAL MIX

4C. EARTHQUAKES and AID

Emergency APPEAL

HAITI EARTHQUAKE

On 12th January 2010 a massive earthquake hit Haiti, killing 250,000 people and reducing much of the capital city to ruins. Aid agencies say huge amounts of help will be needed.

With the help of the information above, answer the following questions:

(i) Describe **TWO** types of damage caused by earthquakes.

(ii) Describe the type of aid that organisations like Concern need to provide immediately after an earthquake.

[10]

(i) Two types of damage @ 3m each, divided as follows:
Each of two types stated = 2m, dev. + 1

(ii) Four points of information on type/s of aid @ 1m each.
Accept different types named and/or described/justified to a max. of four.

(i) 2 + 1 and 2 + 1 (ii) 1 + 1 + 1 + 1 = 10

Sample: (i) *The earth shakes* (1) *and buildings are knocked* (2); *people are killed* (2) *by falling houses* (1); *roads crack* [2] *and lorries crash* [1].
Bridges crack and fall [2+0]

Sample: (ii) *People need emergency aid* (1) *such as food* (1), *medicine* (1) *and shelter* (1).
OR
They give tents (1) *because people have no homes* (1) *and doctors* (1) *help the injured* (1).

Question 4. A GEOGRAPHICAL MIX

4D. TRAFFIC IN CITIES

Look carefully at this traffic camera image taken at Newland's Cross, Dublin.
It shows heavy traffic at 17.29 Hrs. (5.29 pm) on 5th July 2010.

(i) Given the time of day, is the traffic **leaving** the city OR **entering** the city?

(ii) Explain **TWO** reasons why traffic congestion happens in our towns and cities.

(iii) Explain **TWO** methods which could be used to ease such traffic congestion.

[10]

(i) Correct answer (leaving) = 2m.
(ii) Two reasons @ 2m each divided as follows:
Each of two reasons stated = 1, dev. + 1.
(iii) Two methods @ 2m each divided as follows:
Each of two methods stated = 1, dev. + 1.

(i) 2; (ii) 1 + 1 and 1 + 1 ; (iii) 1 + 1 and 1 + 1 = 10.

Sample: (i) *Leaving* (2); (ii) *At rush hour* (1) *people are going home at the same time* (1).
The streets are too narrow (1) *for large trucks* (1).

Sample: *(iii) If people used public transport* (1) *like Luas* (1) *and buses* [1];
People could walk to school (1) *so less cars on the road* (1).

Question 5. AERIAL PHOTOGRAPH

Study the aerial photograph of the Dingle/An Daingean area supplied with this paper.
[**HINT**: Remember - This is an oblique photograph. Therefore, you should **use the correct terms** e.g. left background, right middleground, centre foreground, etc.]

A. The local council have asked you to build a public swimming pool and leisure centre in Dingle/An Daingean.

(i) Using the correct terms, identify a suitable location for the public swimming pool and leisure centre on the aerial photograph.

(ii) Explain **TWO** reasons why you chose this site.

(iii) Suggest **ONE** possible disadvantage of this site.

[12]

(i) Suitable location @ 2m.
(ii) Two reasons at 4m each divided as follows;
Each of two reasons stated = 2m , dev . + 2.
(iii) Disadvantage stated = 2m.

(i) 2 ; (ii) 2 + 2 and 2 + 2 ; (iii) 2 = 12

Sample: *(i) Centre Foreground* (2). (ii) *The land is flat* (2) *and easy to build on* (2); *there is a road beside it* (2) *and people could get there from the town* (2).
it is near a playing field [2] *so all the leisure things would be close* [2].
(iii) *It might cause too much traffic* (2).

B. Dingle/An Daingean has a number of land-uses which may benefit local people and tourists.

(i) Using the correct terms, name and locate **TWO** land-uses in Dingle.

(ii) Give **TWO** reasons why **ONE** of the land-uses you named above might benefit local people or tourists.

[8]

(i) Each of two land uses named @ 2m each
Each of two land uses located @ 1m each.

(ii) Two reasons given @ 1m each.

(i) 2 + 1 and 2 + 1 (ii) 1 + 1 = 8

Sample: (i) *Playing Field* (2) *at Right Foreground* (1) and *Harbour (jetty/marina)* (2) *at Right Foreground* (1).

(ii) *People could go boating* (1) *and swimming* (1) *in the harbour*.

Question 5. AERIAL PHOTOGRAPH

C. Draw a sketch map of the whole area shown on the photograph.

On your sketch map **show and label** each of the following:

- Dingle Harbour
- Two connecting roads
- A sports ground
- An area of agricultural land.

[10]

Feature	Show	Label	
Dingle Harbour	1	1	Four sides of frame must be drawn; Correct proportion: Landscape.
Two connecting roads	1	1	
A sports ground	1	1	
Agricultural land	1	1	
Frame	Four sided = 1; Proportion = 1.		
Total	10		

Note: **If tracing is presented mark as above, divide by two rounding upwards to nearest whole number e.g. 7/2 = 3 ½ round to 4.**
If substantial part of the area is NOT included in sketch apply same procedure.