

**Marking Scheme – Geography – Junior Certificate
Higher Level 2007
Section 2**

Question 1. RAINFALL AND DROUGHT

- A.** The map shows annual precipitation (rainfall) in millimetres throughout Ireland.
The diagram shows the movement of air blowing in from the sea over a mountain.

(i) What is the annual rainfall at Dublin City?

(2)

Rainfall figure @ 2 marks

Suggested answer.

Less than 800mm

(ii) What name is given to lines on maps which show places of equal precipitation?

(2)

Name @ 2 marks

Suggested answer.

Isohyet

(iii) Explain why the place labelled X on the diagram could be expected to have higher precipitation than the place labelled Y.

(6)

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

Suggested answer.

X is on the windward side. Moisture laden winds rise and cool forming rain.

Y is in the rain shadow. At Y the winds descend and absorb moisture

At X winds are ascending and lose moisture.

Question 1. (continued)

B. *Some countries use large irrigation schemes to help overcome problems associated with water shortages.*

(i) Name **one** large scale irrigation scheme that you have studied.

(1)

Name @ 1 mark

Suggested answer.

Central Valley California, Aswan Dam scheme in Egypt.

(ii) Describe **one** advantage and **one** disadvantage of that irrigation scheme.

(8)

Two descriptions @ 4 marks each. (St. 2 mks + Dev 2 mks)

Suggested answer.

Advantages

Flooding is controlled and farmers can grow crops in a safer environment.

The water is used for irrigation so more food is produced like citric fruits.

Hydro-electric Power is produced and industrial development encouraged.

Disadvantages

People displaced from homes when land is flooded under reservoir.

Alluvial soils no longer spread on land during floods and land is not as fertile.

Mosquitoes breed in still water of lake spreading disease like malaria.

Salt levels in lakes increase poisoning land and fish life.

Question 1. (continued)

C. *Some African countries suffer because climate change may result in a shortage of precipitation.*

The graph shows how rainfall levels changed over time in Somalia between 1960 and 2006.

(i) Name the year that had the least rainfall.

Name @ 1 mark

Suggested answer.

1985 (1)

(ii) Name the year that had the most rainfall.

Name @ 1 mark

Suggested answer.

1964 (1)

(iii) Describe **three** effects, which a severe shortage of rain might have on the development of a country such as Somalia.

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

(9)

Suggested answer.

Famine will effect the country because crops can't grow.

Millions of hectares of land destroyed. Soil will dry out and blow away.

Migration. People will leave land and move to towns and cause overcrowding

Q.2. RIVERS

A. Feature of river erosion

Name **one** feature of river erosion and with the aid of a diagram explain how it was formed.

Name of feature @ 2 marks

Suggested answer.

Waterfall, V shaped valley, interlocking spurs, meanders ?

Two explanations @ 4 marks (St: 2marks + Dev 1 mk + ref. to diagram 1 mark (10)

Suggested answer.

Layer of hard rock on soft rock. Fast flowing water. Abrasion, attrition, hydraulic action and solution.

B. Feature of river deposition

Name **one** feature of river deposition and with the aid of a diagram explain how it was formed.

Name of feature @ 2 marks

Suggested answer.

Meanders/ oxbow lakes/ levees/delta /floodplain .

Two explanations @ 4 marks (St: 2marks + Dev 1 mk + ref. to diagram 1 mark (10)

Suggested answer.

Material is rolled, bounced, carried in suspension and solution.
River slows down, load is dropped (deposited).

Question 2.(continued)

C. Rivers and People

(i) Name and briefly explain **one** way that people use rivers.

Name @ 2 marks

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

(5)

Suggested answer.

Tourists use the river for cruising and fishing e.g.. Shannon.

Blessington lake is used for HEP and water for drinking..

Transport, the River Rhine, a cheap form of transport for heavy goods.

(ii) Name and briefly explain **one** way that people pollute rivers.

Name @ 2 marks

Suggested answer.

Industry, farming, domestic

One explanation @ 3 marks

(5)

Suggested answer.

Factories dump waste into the river.

Effluent from septic tanks

Slurry spread on land.

Question 3. GEOGRAPHICAL MIX

Answer any three of the questions A to D below

A. Global Warming

(i) Name and explain **two** ways that people help to cause global warming.

Name two ways @ 1 mark each

One explanation of each way @ 2 marks.

(6)

Suggested answer.

Burning fossil fuels. Releases carbon dioxide and sulphur dioxide into atmosphere

Deforestation. Trees take in CO² and give out oxygen.

Clearing land use to feed huge herds of animals that produce methane.

(ii) Name and describe **one** way in which global warming could harm people in the future.

Name one way @ 2 marks

One description @ 2marks

(4)

Suggested answer.

Sea levels will rise and low-lying areas like Netherlands will flood

Climate change, parts of Africa will get drier and more people will die and crops will fail.

B. Population Change

Examine the diagrams which show the population structures of Germany and Ethiopia.

(i) What are these diagrams called?

Name @ 1 mark

(1)

Suggested answer.

Population / Age – Sex / Pyramid

(ii) Describe how the diagrams show the differences in **birth rates**, **death rates** and **life expectancy** between the two countries.

Three descriptions @ 3 marks (St. 2 mks + Dev 1mk) ref to diagrams.

(9)

Question 3. B (continued)

Suggested answer.

There are more Males born in Ethiopia 9.5% but in Germany there are only 2.5%
Women live longer in Germany.
More people die before 60 in Ethiopia than in Germany

C. Irish Soil Types

Examine the map, which shows some of Ireland's principal soil types.

(i) Identify the most common soil type in the south east of Ireland.

Name @ 1 mark

Suggested answer.

Brown Soils

(1)

(ii) Choose **two** Irish soil types and describe any **three** differences between them.

Three differences @ 3 marks each

(9)

Suggested answer.

Brown Earth

Podsol

Deciduous

Coniferous

Well drained

Leached

Drier

Wetter

Dark Brown

Greyish

D. Fold Mountains

The movements of crustal plates have given rise to the fold mountains shown on the picture.

(i) With the aid of a diagram, explain how **fold mountains** are formed.

Two explanations @ 4 marks each (St. 2 mk + Dev 1mk + 1mk)

(8)

Suggested answer.

Plates converging/colliding cause uplift from the sea floor

Plates collide and the land buckles causing upfolds and downfolds.

(ii) Name **one** range of fold mountains in Ireland.

Name @ 2 marks

(2)

Suggested answer.

Armorican folds of Cork and Kerry

Question 4. INDUSTRIAL LOCATION AND URBAN STUDIES

A. Industrial Location

The general location of Britain's iron and steel industry has changed over time. Explain why this happened. You may use the diagram below to assist you.

Three explanations @ 4 marks(St 2 mks + Dev 2 mks) + 3 marks(St. 2 mks + Dev 1 mk)
+ 3 marks(2mks + Dev 1mk)

(10)

Suggested answer.

The Industry used charcoal for fuel and were located in the Forest of Dean.

Forests ran out and factories moved to coalfields .

They moved to the coast when coalfields became exhausted and it was more economic to import raw materials.

B. Urban Renewal

The picture shows an area in Dublin that has undergone urban renewal.

What is urban renewal?

One definition @ 2 marks

(2)

Suggested answer.

Knocking down old houses and building new ones.

Removing old houses and replacing with offices and apartments in the city centre

(ii) Explain how urban renewal has benefited local people in **one** Irish urban area that you have studied.

Name urban area @ 2 marks

Suggested answer.

Any reasonable example related to the explanation.

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

(8)

Suggested answer.

Amenity areas must set aside in planning new housing estates so children can play.

Town renewal means refurbishing old buildings or harmonising the old with the new.

Pedestrianisation of certain parts of towns so people can shop e.g. Grafton Street.

The introduction of street furniture e.g. benches, trees, flowerbeds etc.

Question 4. (continued)

C. Urban Functions

The functions of many towns have changed over time.

In the case of **one** named Irish town or city that you have studied, describe how its functions have changed. In your answer refer to **three** different functions.

Name @ 1 mark

Suggested answer.

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

(10)

Suggested answer.

Navan defensive > Market town > Manufacturing carpet / furniture > mining

Limerick In Viking times it was defensive then it became a Market town and now it has a University and a Regional Hospital .

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Question 5. ORDNANCE SURVEY MAP AND AERIAL PHOTOGRAPH

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

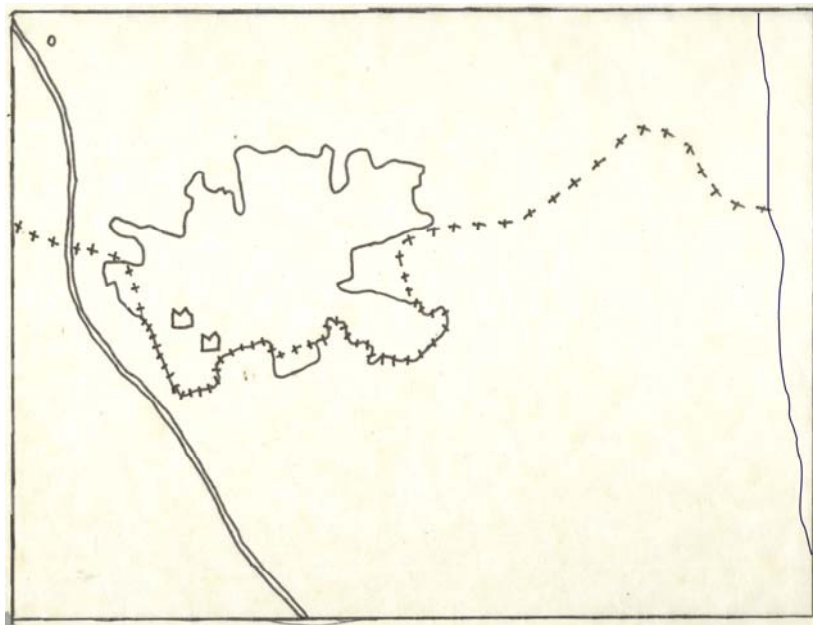
On your sketch map show and name each of the following features:

- The built up area of Drogheda
- An industrial estate within the built up area of Drogheda
- The most northerly antiquity shown on the map
- A motorway
- The county boundary

Five features @ 2 mks

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

(12)



C

A

B

D

B. Using the Ordnance Survey map name and describe two different tourist attractions shown in the Bettystown and Laytown area in the east and south east of the map.

Two tourist attractions @ 2 marks each

Suggested answer.

18 hole golf course

Beach.

Historical

Holy Well

Fishing

Question 5. B (continued)

Two descriptions @ 4 marks each (St 2 mks + ref. to O.S. 2 mks.)

(12)

Suggested answer.

Golf - recreation – O158/9 743/4

Historical – Holy Well – O154730

Beach – swimming/swimming -

C. Name and locate **two different land-uses shown on the **Aerial Photograph**.**

Two land-uses @ 3 marks each

(6)

(Must be named and located for full 3 marks.)

Suggested answer.

Forestry foreground

Residential centre background

Church centre middle

Oil storage tanks right background

Industrial in right background