Coimisiún na Scrúduithe Stáit
State Examinations Commission

Junior Certificate 2017

Marking Scheme

Geography

Ordinary Level

Note to teachers and students on the use of published marking schemes

Marking schemes published by the State Examinations Commission are not intended to be standalone documents. They are an essential resource for examiners who receive training in the correct interpretation and application of the scheme. This training involves, among other things, marking samples of student work and discussing the marks awarded, so as to clarify the correct application of the scheme. The work of examiners is subsequently monitored by Advising Examiners to ensure consistent and accurate application of the marking scheme. This process is overseen by the Chief Examiner, usually assisted by a Chief Advising Examiner. The Chief Examiner is the final authority regarding whether or not the marking scheme has been correctly applied to any piece of candidate work.

Marking schemes are working documents. While a draft marking scheme is prepared in advance of the examination, the scheme is not finalised until examiners have applied it to candidates' work and the feedback from all examiners has been collated and considered in light of the full range of responses of candidates, the overall level of difficulty of the examination and the need to maintain consistency in standards from year to year. This published document contains the finalised scheme, as it was applied to all candidates' work.

In the case of marking schemes that include model solutions or answers, it should be noted that these are not intended to be exhaustive. Variations and alternatives may also be acceptable. Examiners must consider all answers on their merits, and will have consulted with their Advising Examiners when in doubt.

Future Marking Schemes

Assumptions about future marking schemes on the basis of past schemes should be avoided. While the underlying assessment principles remain the same, the details of the marking of a particular type of question may change in the context of the contribution of that question to the overall examination in a given year. The Chief Examiner in any given year has the responsibility to determine how best to ensure the fair and accurate assessment of candidates' work and to ensure consistency in the standard of the assessment from year to year. Accordingly, aspects of the structure, detail and application of the marking scheme for a particular examination are subject to change from one year to the next without notice.

Introduction

In considering this marking scheme, the following should be noted:

- The detail required in any answer is determined by the context and the manner in which the question is asked and by the number of marks assigned to the answer in the examination paper.
- Words, expressions or phrases must be correctly used in context and not contradicted, and where there is evidence of incorrect use or contradiction, the marks may not be awarded.
- As a general rule, if in doubt about the validity of any answer, examiners must consult their advising examiner before awarding marks.
- The suggestions, examples etc. in the scheme are not exhaustive and alternative valid answers etc. are acceptable.

Section 1 Folder (60 marks)

Note: **Questions 9, 10, 11 and 12 have** either/or options. Mark both if both attempted but credit only one even if both are correct. Credit the highest mark.

Question	Suggested Answer	Marks
1.	Metamorphic rock	3
2.	Tsunami	3
3.	Convection currents	3
4.	Stalactites	3
5.	(i) 6.1°C (ii) July (iii) 7.7°C	1 1 1
6.	Levees	3
7.	15%	3
8.	The burning of fossil fuels.	3
9A.	Groynes	3
9B.	An arête	3
10A.	North Atlantic Drift	3
10B.	At the equator at X.	3
11A.	Stevenson Screen	3
11B.	6.2	3
12A.	Country A	3
12B.	From South-West to North-East.	3
13.	Land values increase towards city centre.	3
14.	Urban redevelopment and renewal.	3
15.	Computer factory	3
16.	Deciduous woodland	3
17.	Coal, natural gas, oil	3
18.	W 36 69	3
19.	Post Office	3
20.	True False True	1 1 1

SECTION 2 (90 marks)

Answer any **THREE** questions.

All questions carry equal marks.

Question 1. ORDNANCE SURVEY MAP

Study the Ordnance Survey map supplied with this paper.

1A. 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 built up area of Macroom
- A reservoir lake
- The River Lee
- The N22 National Primary Road.

Feature	Shown	Labelled	
Macroom built up area	1	1	Frame must have four lines drawn and the correct proportion i.e. landscape.
Reservoir lake	1	1	
River Lee	1	1	
N22 road	1	1	
Frame	1 (four sides) + 1 (landscape)		
Total	**10**		

- If a tracing is presented, mark as above and divide total by 2, rounding upwards to the nearest whole number. For example, 7/2 = 3½ = 4.
- If a substantial part of the area is not included in the sketch, apply same procedure.
- A number of small maps: mark each and divide total for each by two, then credit the highest of these marks.
- Expect an area for the Reservoir, not a dot. Reasonable accuracy.
- Expect at least half of the N22 road and of River Lee.

Total 10m

1B. The town of Macroom provides a variety of services.

(i) Name **and** locate, using grid references, **TWO** of these services.

Two services @ 3m each as follows:

Service named @ 2m
Service located Grid Reference @ 1m

(2m + 1m) + (2m + 1m) = 6m

Accept 4 or 6 figure grid reference but subzone letter essential for this mark.

(ii) State how each of these services can be used by the local people.

Two uses stated @ 1m each

1m + 1m = 2m

Exemplars:
(i) Post Office (2) at W341 730 (1); School (2) at W 337 731 (1).

(ii) Post Office to pay bills (1); Schools for children to learn (1).

Total 8m

1C. Explain **THREE** reasons why the town of Macroom developed at this location, using evidence from the Ordnance Survey map to support each reason.

Three reasons explained at 4m each as follows:

Statement 2m + Development / Map Evidence 2m

(2m + 2m) + (2m + 2m) + (2m + 2m) = 12m

Exemplars:
It is on a river (2) at W34 73 (2).
People have easy access (2) as there are four roads here (2).
There is a castle (2) for defence (2).

Total 12m

Question 2. AERIAL PHOTOGRAPH

2A. Draw a sketch map of the area shown on the aerial photograph.

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

- **TWO** connecting streets
- The river
- The bridge
- A playing field.

Feature	Shown	Labelled	
Two connecting streets	1	1	Frame must have four lines drawn and the correct proportion i.e. landscape.
The river	1	1	
The bridge	1	1	
A playing field	1	1	
Frame	1 (four sides) + 1 (landscape)		
Total	**10**		

- Streets must be shown to have width (two lines), if single lines allow 1m only.
- The river must be shown to have width (two lines), if single line allow 1m only.
- The bridge must be shown to have width (two lines), if single line allow 1m only.
- A playing field - expect an area not a dot.
- If a tracing is presented mark as above and divide total by 2, rounding upwards to nearest whole number. For example, 7/2 = 3 ½ = 4.
- If a substantial part of the area is not included in sketch, apply same procedure as above.
- A number of small maps: mark each and divide total for each by two, then credit the highest of these marks.

Total 10m

2B. It is proposed to build a new hotel and leisure complex in the area covered by the aerial photograph.

(i) Using the correct term (left foreground etc.), identify a suitable site for this hotel and leisure complex.

Location 2m

- **Accept location marked on sketch map or on aerial photograph as location in part (ii) but do not award marks for part (i).**
- **If in part (i) the site is recognisable but the correct term is not used, allow zero for part (i) but candidate is eligible for full marks thereafter.**
- **If no location or location is unrecognisable, allow zero for part (i) and statement marks only in parts (ii) and (iii).**

(ii) Using evidence from the aerial photograph, explain **TWO** reasons why you selected this site.

Two reasons explained @ 3m each as follows:

Reason stated 2m + Development 1m

(2m + 1m) + (2m + 1m) = 6m

(iii) Suggest **ONE** possible objection to this site.

Statement 2m

Exemplars:

(i) Centre (2).

(ii) Near roads (2) for transport (1).
Large green space (2) so plenty of room for car park (1).

(iii) Loss of green area (2).

Total 10m

2C. Look carefully at the streets on the aerial photograph.

(i) Using the correct term (left foreground etc.), give **ONE** specific location on the aerial photograph where traffic congestion might occur in Macroom.

Location 2m

- **Accept location marked on sketch or on aerial photograph as location in part (ii) but do not award marks for part (i).**
- **If in part (i) the site is recognisable but the correct term is not used, allow zero for part (i) but candidate is eligible for full marks thereafter.**
- **If no location or location is unrecognisable, allow zero for part (i) and statement marks only in (ii).**

(ii) Explain **ONE** reason why traffic congestion might occur at this location.

One reason explained @ 4m as follows:

Reason stated 2m + development 2m

2m + 2m = 4m

(iii) Describe **TWO** ways by which the local council could reduce traffic congestion in Macroom.

Method 1 Statement 1m + Development 1m
Method 2 Statement 1m + Development 1m

(1m + 1m) + (1m + 1m) = 4m

Exemplars:

(i) In the centre middleground (2).

(ii) As there are three streets coming from different directions (2) and they all meet here (2).

(iii) Traffic lights (1) to allow traffic to flow orderly (1).
Road markings (1) to help guide the driver which lane to use (1).

Total 10m

Question 3. ECONOMIC GEOGRAPHY

3A. Resources and Technology

(i) Describe **THREE** ways that technology (machines) has increased the amount of peat that is extracted (removed).

Three descriptions @ 2m marks each as follows:

Statement 1m + Development 1m

(1m + 1m) + (1m + 1m) + (1m + 1m) = 6m

(ii) Describe **ONE** possible use of bogs after the peat has been removed.

Description: Statement 1m + Development 1m

1m + 1m = 2m

Exemplars:

(i) Trains (1) carry huge loads across the bog (1).
Tractors (1) faster than horse and cart (1).
Hopper (1) is faster than slean (1).

Note: Ditcher = drains; Grader = levels; Miller = scrapes/shreds;
Ridger = ridges.

(ii) They can be made into wetlands (1) for wildlife (1).

Total 8m

3B. Manufacturing Industry

(i) Name **ONE** factory that you have studied **and** state where it is located.

Factory named 2m
Location stated 2m

2m + 2m = 4m

(ii) Explain **TWO** reasons why the factory that you named in part (i) developed at this location.

Two reasons explained @ 3m each as follows:

Statement 2m + Development 1m

(2m + 1m) + (2m + 1m) = 6m

(iii) Name **ONE** Input and **ONE** Output of the factory that you named.

Input named 1m
Output named 1m

1m + 1m = 2m

Exemplars:

(i) PC Pro (2), Cork (2)

(ii) Near roads (2) for transport (1).

Near the city (2) for workers (1).

(iii) Inputs : workers (1)

Outputs: computers (1)

Total 12m

3C. Tourism

(i) What percentage of visits to Museums and Art Galleries were by tourists from Great Britain?

18 (%) = 2m

(ii) What percentage of visits to Houses and Castles were by tourist from the Rest of Europe?

43 (%) = 2m

(iii) Calculate **X**, the percentage of visits to Houses and Castles by tourists from North America.

31 (%) = 2m

(iv) Explain **ONE** way in which tourism can have a negative effect on a region.

One explanation: Statement 1m + Development 1m

1m + 1m = 2m

Exemplars:
It can be very noisy (1) as people would be having loud parties (1).

(v) Explain **ONE** way in which tourism can help to improve transport and communication links in a region.

One explanation: Statement 1m + Development 1m

1m + 1m = 2m

Exemplars:
There will be more buses (1) put on so people can get in and out easily (1).
OR
There may be an airport built (1) like Knock (1).

Total 10m

Question 4. GEOGRAPHICAL MIX

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

4A. Migration

(i) With the help of the photographs above, explain **TWO** push factors that influence migration.

Push factor 1 explained: Statement 2m + Development 1m
Push factor 2 explained: Statement 2m + Development 1m

(2m + 1m) + (2m + 1m) = 6m

Exemplars:
Few jobs (2) with poor pay (1).
Escaping war (2) so the people will be safer (1).

(ii) Explain **TWO** effects on the West of Ireland of people migrating to urban areas such as Dublin.

Effect 1 explained: Statement 1m + Development 1m
Effect 2 explained: Statement 1m + Development 1m

(1m + 1m) + (1m + 1m) = 4m

Exemplars:
Farmland becomes abandoned (1) as the young men leave to get jobs in the city (1).
Bus service stop (1) as not enough people using them (1).

Total 10m

4B. Economic Inequality

(i) Name **ONE** developing country that you have studied.

Developing economy named 2m

(ii) Explain how any **THREE** of the factors listed below have slowed the development of this country:

- Climate change
- Population growth
- Unfair trade
- War.

Three factors explained @ 3m each as follows:

Statement 2m + Development 1m

(2m + 1m) + (2m + 1m) + (1m + 1m) = 8m

Exemplars:

(i) Ethiopia (2)

(ii) Drought (2) causes famine (1).
OR They need all their money to try to feed (2) and educate the children (1).
OR Because of Unfair Trade they pay more for imports (2) and get less for exports (1).
OR They spend money on weapons (2) and wars ruin farming (1).

Note:

- Two factors @ 2m + 1m and the third factor at 1m + 1m.
- Award marks to the benefit of the candidate.

Total 10m

4C. Weather Forecasting

(i) Examine the isobars on the weather chart opposite.
Is there high pressure or low pressure at **X**?

Low Pressure 2m

(ii) What type of front is shown at **Y**?

Cold front 2m

(iii) Describe how this front (**Y**) will change the weather at Sligo as it approaches.

Description: Statement 1m + Development 1m

1m + 1m = 2m

Exemplars:
It will make weather colder (1) and wetter (1).

(iv) Explain how frontal rainfall occurs.

Explanation: Three elements @ 2m + 1m + 1m

2m + 1m + 1m = 4m

Exemplars:
It occurs when cold and warm air (2) meet (1), it rises (1) it cools [1] and condenses [1] and forms clouds [1].

Total 10m

4D. Climate Types

(i) Name **and** describe **ONE** climate type that you have studied.

Climate named @ 3m

Description two elements @ 1m + 1m

(3m) + (1m + 1m) = 5m

(ii) Describe the vegetation resulting from this climate.

Two elements of description @ 2m + 1m

2m + 1m = 3m

(iii) Name **ONE** way in which this climate affects people.

One way named 2m

Exemplars:

(i) Hot Desert (3); It is hot all year round (1) and is dry (1).
OR Equatorial (3); It is always hot (1) and is very wet (1).
OR Savanna (3); Half the year is very hot (1) and dry (1).

(ii) The Hot Desert has very little vegetation (2). Cactus grows there (1). They can survive on little water [1].
OR It is jungle (2) with a canopy (1) and hardwoods [1].
OR It has trees spread out (2). There is elephant grass (1) and great growth in the wet months [1].

(iii) The heat can kill people (2).

Total 10m

Question 5. SHAPING THE EARTH'S SURFACE

5A. Deposition

(i) Name **ONE** feature formed by glacial deposition **OR** coastal deposition.

Feature named 2m

(ii) Explain, with the aid of a labelled diagram, how this feature was formed.

Diagram 3m graded 3/2/0 (must be annotated for full 3)

Three elements of explanation at 2m + 2m + 1m

2m + 2m + 1m = 5m

Exemplars:

(i) Beach/spit/bar /tombolo/sand dunes/lagoon etc.
Or
Morraines/drumlin/erratic/outwash plains/eskers etc.

(ii) Diagram
A beach happens when the waves break (2) the swash (2) carries the sand in (1) but the weak backwash [1] deposits it [1].
Or
Diagram
A drumlin is an oval shaped hill (2) formed when boulder clay (2) was laid down (1) by a glacier moving/melting [1] and smoothened /shaped by later ice movements [1].

Total 10m

5B. Mechanical Weathering

(i) Name the type of mechanical weathering shown in the images above.

Name 3m

(ii) With the aid of the images above, describe how this type of mechanical weathering occurs.

Description: Five elements of explanation @ 1m each

1m + 1m + 1m + 1m + 1m = 5m

(iii) Explain the term *scree*.

Explanation: Statement 1m + Development 1m

1m + 1m = 2m

Exemplars:

(i) Freeze thaw action/frost shattering/frost action. (3)

(ii) Water gathers in cracks (1). At night (1) it freezes (1) and expands (1). The crack widens (1) and some breaks off [1].

(iii) This is pieces of rock (1) at the foot of a hill (1).

Total 10m

5C. Soils

(i) Name **and** describe **ONE** Irish soil type that you have studied.

Soil type named 2m
Description: two elements @ 1m each

(2m) + (1m + 1m) = 4m

(ii) Explain how any **TWO** of the following influence soils:

- Minerals
- Plant remains
- Micro-organisms
- Air and water.

Two factors explained @ 3m each as follows:

Statement 2m + Development 1m or 2 elements

(2m + 1m) + (2m + 1m) = 6m

Exemplars:

(i) Brown earth (2) soil is dark in colour (1) and is very fertile (1).

(ii) Minerals- comes from the rocks (2) and are soluble (1).
Plant remains nourish plants (2) and help hold soil particles together (1).
Micro organisms e.g. earthworm (2) and insects help to break down dead plants (1).
Air and water supplies oxygen (2) and dissolves minerals (1).

Total 10m