Coimisiún na Scrúduithe Stáit
State Examinations Commission

Junior Certificate 2018

Marking Scheme

Geography

Higher 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

Allow 20 Questions @ 3 marks each = 60 marks

1. 3 @ 1 mark each
A = Clint, B = Stalactite, C = Pillar/Column

2. 3 @ 1 mark each
(i) Collide (ii) Andes (iii) Armorican foldings

3. 3 @ 1 mark each
(i) Mid-Atlantic Ridge (ii) Separating (iii) Convection currents

4. 1 @ 3 marks
Baker, factory worker, brewer, cabinet maker

5. 3 @ 1 mark each
(i) Cold front (ii) Warm front (iii) Isobar

6. 3 @ 1 mark each
(i) Horizons (ii) Humus (iii) Brown earths

7. 3 @ 1 mark each
(i) Inner core (ii) Magma (iii) Tectonic plates

8A. 3 @ 1 mark each

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

OR

8B. 3 @ 1 mark each
(i) Hygrometer (ii) Isohels (iii) Cyclonic (frontal) rainfall

9A. 1 @ 3 marks
Land reclaimed from the sea

OR

9B. 1 @ 3 marks
A city that has twice the population of the next largest city.

10A. 3 @ 1 mark each
(i) Waterfall (ii) River erosion (iii) Upper

OR

10B. 3 @ 1 mark each
(i) Basin (ii) Alluvium (iii) Meanders

11. 1 @ 3 marks
Global warming

12. 3 @ 1 mark each
(i) Tied aid (ii) Development aid (iii) Emergency aid

13. 1 @ 3 marks
2, 4, 5

14. 3 @ 1 mark each
(i) Raised bogs (ii) Non-renewable (iii) Sleans

15. 1 @ 3 marks
Kildare Street

16. 3 @ 1 mark each
Bars drawn, Cork County 850, Meath County 300, Waterford County 450

17. 3 @ 1 mark each

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

18. 3 @ 1 mark each
(i) Centre background (ii) Left Middleground (iii) Oblique

19. 3@ 1 mark each
(i) True (ii) True (iii) False

20. 1 @ 3 marks
2.0 km

Section 2

Allow Three questions @ 30 marks each

Question 1. THE EARTH'S SURFACE

1A. Rocks

Examine the photographs above and answer each of the following questions.

(i) State whether photograph **A** is an igneous, a sedimentary or a metamorphic rock.
Rock group named @ 1m
Picture A = *Sedimentary rock*

(ii) State whether photograph **B** is an igneous, a sedimentary or a metamorphic rock.
Rock group named @ 1m
Picture B = *Igneous rock*

(iii) Name an example of a sedimentary rock.
Rock named @ 1m
Any valid sedimentary rock e.g. limestone, sandstone etc.

(iv) Describe and explain how the sedimentary rock named by you in part (iii) was formed.
Description @ 7m (St2 + D1 + D1 + D1 + D1 + D1)

Total 10m

1B. Weathering

Explain, with the aid of a labelled diagram, how rocks are weathered by frost action.

Labelled Diagram @ 2m
Explanation @ 8m (St2 + D1 + D1 + D1 + D1 + D1 + D1)
Look for reference to water collecting in cracks, temperatures drop, water freezes and expands etc.

Total 10m

1C. Mass Movement

(i) Name **one** slow type of mass movement and describe **two** effects of this slow mass movement.

Type named @ 1m
e.g. Soil creep/Solifluction or any valid type of slow mass movement.

Two Effects Described @ 3m each (St2 + D1)
e.g. terracettes, trees bend etc.

(ii) Explain the impact of precipitation on mass movement.

Explanation @ 3m (St2 + D1)
e.g. Water makes the soil heavier,
Water can act as a lubricant etc.

Total 10m

Question 2 THE EARTH'S SURFACE AND OUR PLANET

2A. Greenhouse Effect

Study the diagram above and answer each of the following questions.

(i) What is the name given to the envelope of gases surrounding the earth (**X**)?
Feature named @ 1m
The atmosphere.

(ii) Explain how the greenhouse effect occurs.
Explanation @ 7m (St2 + D1 + D1 + D1 + D1 + D1)
e.g. Cars burn fossil fuels or other valid reasons such as landfill, deforestation, large cattle herds etc.

(iii) Name **two** ways in which the greenhouse effect can be reduced.
Two ways named @ 1m each
e.g. Increase the number of electric/hybrid car
Use renewable energy
Insulation of homes
Increase use of public transport etc.

Total 10m

2B. Volcanoes

(i) Name **one** active volcano.
Volcano named @ 2m
e.g. Mount Etna or any valid active volcano.

(ii) Describe **one** positive effect and **one** negative effect of volcanoes**.**
Positive effect described @ 4m (St2 + D1 + D1)
e.g. Tourism etc.

Negative effect described @ 4m (St2 + D1 + D1)
e.g. Volcanoes destroy cities etc.

Total 10m

2C. Glaciation and Coasts

Answer either (i) **or** (ii)**.**

(i) **Glaciation**

Name **one** feature formed by glacial erosion and with the aid of a labelled diagram, explain how it was formed.

OR

(ii) **Coasts**

Name **one** feature formed by coastal erosion and with the aid of a labelled diagram, explain how it was formed.

Feature named @ 1m
Labelled diagram @ 2m
Explanation of formation @ 7m (St2 + D1 + D1 + D1 + D1 + D1)
One development mark must be for a process.

Features of glacial erosion: *Cirques, Arete, Pyramidal Peak, U-Shaped Valley, Ribbon Lake, Hanging Valley, Fiords and Paternoster Lakes etc.*
Processes: *Plucking, Abrasion, Freeze Thaw etc.*

Features of coastal erosion: *Cliffs, bays and headlands, cave, arch, stack, stump, blowhole, wave cut platform etc.*
Processes: *Hydraulic action, abrasion, compressed air, attrition, solution, destructive waves etc.*

Total 10m

Question 3. GEOGRAPHICAL MIX

Answer **ANY THREE** of the questions **3A, 3B, 3C, 3D**.

3A. Migration

(i) Name **one** example of organised migration you have studied.

Organised migration named @2m
e.g. Ulster Plantation/Colonisation of South America or any valid example of organised migration.

(ii) Explain **two** reasons why this organised migration took place.

Two Explanations @ 2m each (St1 + D1)

(iii) Describe **two** effects of this organised migration on the area that people migrated to.

Two Descriptions @ 2m each (St1 + D1)

Total 10m

3B. Population Pyramids

Examine the population pyramids above and answer the following questions.

(i) Name **one** country with a population structure similar to Pyramid **A.**

Country named @ 1m
Any country in the developed world e.g. Ireland, Germany etc.

(ii) Name **one** country with a population structure similar to Pyramid **B**.

Country named @ 1m
Any country in the developing world e.g. Mali, Sudan, Brazil etc.

(iii) What percentage of the total population in Pyramid **A** are in the 50 to 54 year age group.

Total number @ 2m
6% of total population

(iv) Explain **one** reason why Pyramid **B** has a wider base than Pyramid **A**.

One Explanation @ 3m (St1 + D1 + D1)

(v) Explain **one** reason why Pyramid **A** is wider at the top than Pyramid **B.**

One Explanation @ 3m (St1 + D1 + D1)

Total 10m

3C. Primary Economic Activity

(i) Name the country labelled **X**.
Country named @ 1m
Saudi Arabia

(ii) Name the source of energy most associated with country **X**.
Energy named @ 1m
Oil

(iii) Describe **two** positive impacts that the exploitation of this source of energy has on country **X**.
Two Descriptions @ 4m (St2 + D1 + D1)
e.g. A high standard of living, it has changed the nomadic way of life etc.

Total 10m

3D. Industry

(i) State what is meant by the term footloose industry?
Statement @ 1m
An industry that is not tied to any one location.

(ii) Name **one** example of a footloose industry?
Example named @ 1m
e.g. Intel/Hewlett Packard or any valid footloose industry.

(iii) Secondary economic activities can give rise to local conflicts.
Name and explain an example of such a conflict.
Conflict named @ 2m
e.g. Indaver Incinerator, Co Cork etc.

Explanation @ 6m (St2 + D1 + D1 + D1 + D1)

Total 10m

Question 4. URBAN GEOGRAPHY

4A. Urbanisation in the Developing World

(i) Name **one** city in the developing world that you have studied.
Developing world city named @ 2m
e.g. Calcutta/Kolkatta or any valid city in this developing world.

(ii) Explain **two** problems associated with urban growth in this developing world city.
Two explanations @ 4m each (St1 + D1 + D1 + D1)
e.g. A shortage of housing, pressure on the water system etc.

Total 10m

4B. Urban Renewal

(i) Explain what is meant by *urban renewal*.
One Explanation @ 2m (St1 + D1)
e.g. the demolition of old rundown homes and their replacement with modern residential accommodation

(ii) Explain **two** benefits of urban renewal to local people in an urban area.
Two explanations @ 4 marks each (St2 + D1 + D1)
e.g. fewer derelict buildings, new facilities and services etc.

Total 10m

4C. Traffic Congestion

(i) Describe **one** reason why traffic congestion occurs in Irish cities.
One Description @ 2m (St1 + D1)

(ii) Explain **two** different methods of reducing traffic congestion in Irish cities.
Two Explanations @ 4m each (St2 + D1 + D1)
e.g. Double yellow lines, encourage people to use public transport etc.

Total 10m

Question 5. ORDNANCE SURVEY MAP AND AERIAL PHOTOGRAPH

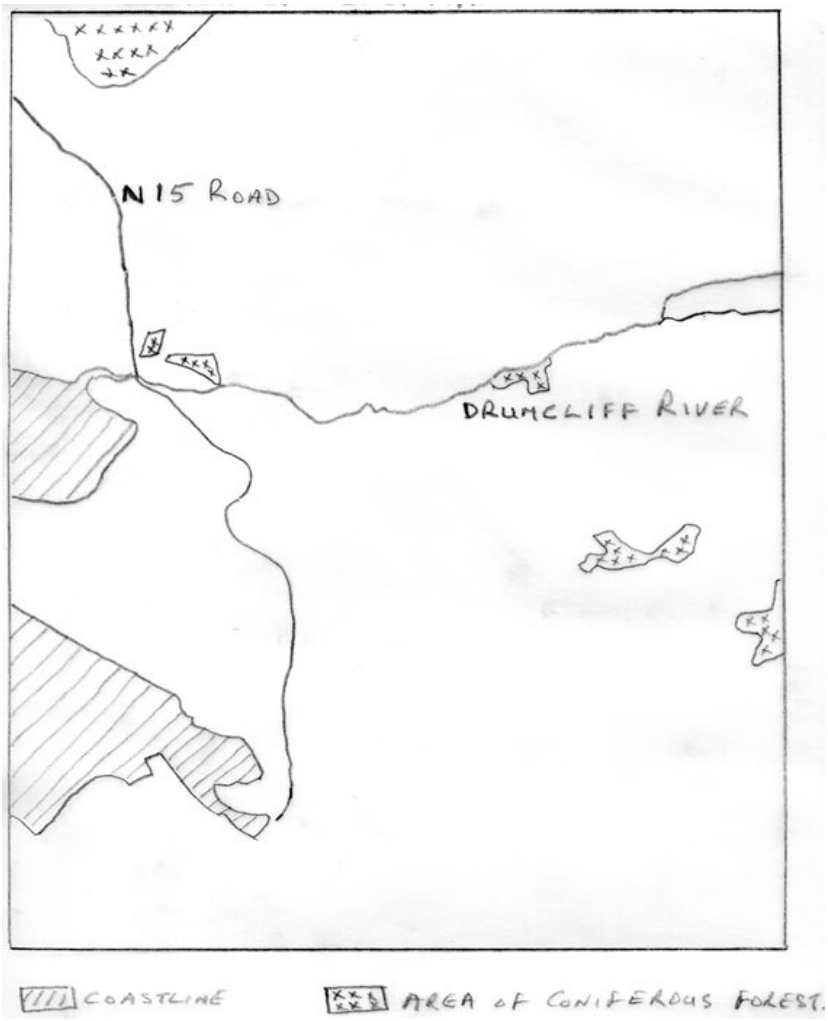
5A. Examine the **ORDNANCE SURVEY MAP** supplied with this paper.

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 entire coastline
- The N15 road
- The Drumcliff River
- An area of coniferous forest

Four features shown and labelled @ 2m each.

Frame and Orientation @ 2m (1 + 1)



Sketch of O.S. Map (for illustration purposes only)

Total 10m

5B. Examine the **ORDNANCE SURVEY MAP** supplied with this paper.

(i) Name, and locate using a six-figure grid reference, **two** different rural settlement patterns evident on the Ordnance Survey map.

Two different rural settlement patterns @ 2m each:
(Named @ 1m + Grid reference @ 1m)
e.g. Ribbon/Linear at G678 387
e.g. Nucleated/Clustered at G674 391

(ii) Explain why each of the two settlement patterns named by you in part (i) above developed at the locations identified by you.

Two Explanations @ 3m (St1 + D1 + D1)

Total 10m

5C. Examine the **AERIAL PHOTOGRAPH** supplied with this paper.
There are a number of different functions evident on the aerial photograph including:

- Residential
- Recreational
- Ecclesiastical
- Industrial

(i) Choose **three** of the functions listed above and using accepted notation locate an example of each of the **three** functions on the aerial photograph.

Three Locations @ 1m each
Residential *– For example Left foreground*
Recreational *– For example Left middleground*
Ecclesiastical *– For example Centre background*
Industrial *– For example Right background*

(ii) Explain why any **one** of the functions chosen in part (i) developed at the location identified by you.

Explanation @ 4m (St2 + D1 + D1)

(iii) Explain **one** reason why there is limited development in the centre background of the aerial photograph.

Explanation @ 3m (St2 + D1)
e.g. This area is prone to flooding, the area is used for farming etc.

Total 10m