education

MPUMALANGA PROVINCE

REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

GEOGRAPHY P1

SEPTEMBER 2025

MARKING GUIDELINES

Stanmorephysics.com

MARKS: 142

TIME: 3 Hours

This marking guidelines consist of 10 pages.

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MARKING PRINCIPLES FOR GEOGRAPHY- NSC SEPTEMBER 2025.

The following marking principles have been developed to standardise marking in all schools in the province.

MARKING

- ALL questions MUST be marked, irrespective of whether it is correct or incorrect.
- Where the maximum marks have been allocated for a particular question, place an **M** over the remainder of the text to indicate the maximum marks have been achieved.
- A clear, neat tick must be used:
    - If ONE mark is allocated, ONE tick must be used:
    - If TWO marks are allocated, TWO ticks must be used:
    - The tick must be placed at the FACT that a mark is being allocated for.
    - Ticks must be kept SMALL, as various layers of moderation may take place.
- Incorrect answers must be marked with a clear, neat cross:
    - Use MORE than one cross across a paragraph/discussion style questions to indicate that all facts have been considered.
    - Do NOT draw a line through an incorrect answer.
    - Do NOT underline the incorrect facts.

For the following action words, ONE word answers are acceptable: **list, name, state, identify**

For the following action words, a FULL sentence must be written: **describe, explain, evaluate, analyse, suggest, differentiate, distinguish, define, discuss, why, how**.

The following action words need to be read within its context to determine whether a ONE- word answer or FULL sentence is required: **provide, what, tabulate and give**

NOTE THE FOLLOWING

- If the numbering is incorrect or left out, as long as the sequence of answers to questions is followed candidates can be credited.
- Spelling errors if recognisable, award the marks provided the meaning is correct.
- Be sensitive to the sense of an answer, which may be stated in a different way.
- In questions where a letter is the accepted response, but the learner writes the actual answer- award marks.
- There will be additional guidelines for the marking of certain questions.

TOTALLING AND TRANSFERRING OF MARKS

- Each sub-question must be totalled.
    - Questions in Section A has five sub-sections, therefore five sub-totals per question required.
    - Section B has three sub-sections and three sub-totals.
    - Sub-section totals to be written in the right-hand margin at the end of the subsection and underlined.
    - Sub-totals must be written legibly.
- Leave room to write in moderated marks on different levels.
- Total sub-totals and transfer total to top left-hand margin next to question number.
- Transfer total to cover of answer book

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SECTION A: CLIMATE AND WEATHER AND GEOMORPHOLOGY

QUESTION 1: CLIMATE AND WEATHER

1.1

1.1.1 C (1)
1.1.2 C (1)
1.1.3 D (1)
1.1.4 B (1)
1.1.5 D (1)
1.1.6 C (1)
1.1.7 D (1) (7 x 1) (7)

1.2

1.2.1 Z (1)
1.2.2 Y (1)
1.2.3 Z (1)
1.2.4 Z (1)
1.2.5 Z (1)
1.2.6 Y (1)
1.2.7 Y (1)
1.2.8 Z (1) (8 x 1) (8)



1.3

1.3.1 Give evidence
Shape of front/convex (1)
Steep gradient of front (1)
Cloud – cumulonimbus (1)
Cold air behind the cold front (1)
[ANY ONE] (1 x 1) (1)

1.3.2 Why do
Cold air undercuts the warm air (2)
Warm air is forced to rise very high (2)
Large scale condensation takes place (2)
Steep gradient causes rapid/strong upliftment of air (2)
[**ANY ONE**] (1 x 2) (2)

1.3.3 Explain why air pressure increases
Cold air/drop in temperature behind the cold front (2)
Cold air is heavy and dense thus increasing air pressure (2) (1 x 2) (2)

1.3.4 account
Steered by the westerlies (2) (1 x 2) (2)

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1.3.5 Explain development of cold front occlusion
Air behind the cold front is colder than the air in front (2)
Cold air moves faster than warm air (2)
Cold front catches up with the warm front (2)
Catches up at the apex, because it is the shortest distance between the fronts (2)
Cold front undercuts the warm front (2)
Warm sector is lifted off the surface (2)
[**ANY FOUR**] (4 x 2) (8)

1.4 1.4.1 Where
Caribbean Sea, and Gulf of Mexico (1)
Eastern North Pacific Ocean (1)
South eastern US (1)
North America (1)
[ANY ONE] (1 x 1) (1)

1.4.2 Account
Hurricanes named alphabetically so Helena is the 8th hurricane in the season(1) (1 x 1) (1)

1.4.3 According to the text
"Maximum sustained winds have remained at 35 mph (56km)" (1)
"rain accumulations of 3 to 6 inches (76mm) with isolated totals of around 10 inches (254mm)" (1)
OR
Wind (1)
Rain (1) (2 x 1) (2)

1.4.4 State
Represents a vortex (1)
Visible eye is characteristic of tropical cyclone (1)
Spiral or swirling movement (1)
Face of the wind looks angry – strong wind (1)
[ANY ONE] (1 x 1) (1)

1.4.5 Explain the necessary factors
Sea temperatures of at least 26,5°C because heat is needed for convection. (2)
High humidity as latent heat is released during condensation (2
Divergence of air at upper levels stimulates circulation and formation of vortex (2)
Unstable air (Intense low pressure) as atmospheric instability makes convection possible. (2)
Little surface friction as ocean surface allows unhindered movement of air (2)
Coriolis force to deflect wind for rotation (2)
[ANY TWO] (2 x 2) (4)

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1.4.6 Explain how these practises can limit injuries

Avoid floodwaters:
Could be contaminated with waterborne diseases (2)
Could have broken glass or twigs that could injury people (2)
Wash your hands frequently:
Prevent diseases to spread (2)
Wear enclosed footwear:
Prevent injuries in water e.g. broken glass (2)
Drink bottled water or boil:
Prevent from waterborne diseases in water (2)
Watch out around broken electrical wires, trees and structures:
Safeguard yourself electricity could be still alive (2)
Keep dry and warm:
Hospitals full not space for pneumonia (2)
Food spoiled:
Warm food can be poisonous (2)
Follow governments advice:
Protect humans from injuries (2) (Accept examples)
[ANY THREE] (3 x 2) (6)

1.5

1.5.1 Name
1. - Anabatic/upslope wind (1)
2. – Katabatic wind/downslope wind (2 x 1) (2)

1.5.2 a. Wind 1 (1) (1 x 1) (1)

b. Air moves up slope from high pressure to low pressure (2) (1 x 2) (2)

1.5.3 Explain the formation of wind **2**

At night air on the high ground (upper slope), at sides of the valley, cools rapidly due to terrestrial radiation.(2)
This cold air drains down the valley sides to form a downslope wind.(2)
At night the smaller air mass in the upper part of the valley cools down quickly it becomes dense and heavy and drains down the valley under influence of gravity(2) (2 x 2) (4)

1.5.4 cause

Trapped pollutants (1)
This forms smog (1)
Radiation fog/mist/haze also forms(1)
[ACCEPT ANY ONE] (1 x 1) (1)

1.5.5 Which

a. Anabatic (1) (1 x 1) (1)

Give a reason

b. Take off in the wind, so anabatic wind is moving up a slope (2) (1 x 2) (2)

1.5.6 Why

Night temperatures are very low and falls below freezing point (2)
Frost develops (frost pocket) and not all crops are frost resistant (2)
[ANY ONE] (1 x 2) (2)

[60]

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QUESTION 2: GEOMORPHOLOGY

2.1

2.1.1 C (1)
2.1.2 B (1)
2.1.3 C (1)
2.1.4 D (1)
2.1.5 A (1)
2.1.6 C (1)
2.1.7 A (1) (7 x 1) (7)

2.2

2.2.1 Z (1)
2.2.2 Y (1)
2.2.3 Z (1)
2.2.4 Y (1)
2.2.5 Z (1)
2.2.6 Z (1)
2.2.7 Z (1)
2.2.8 Y (1) (8 x 1) (8)



2.3

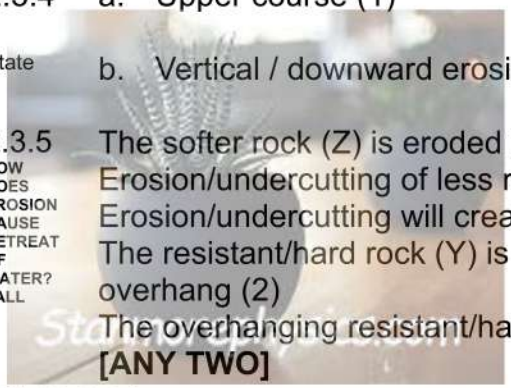
2.3.1 Temporary base level (1)
[CONCEPT] (1 x 1) (1)

2.3.2 Identify
Y – Hard rock (1) (accept examples)
Z – Soft rock (1) (accept examples) (2 x 1) (2)

2.3.3 name ONE
Rapids (1)
Potholes (1)
Terraces (1)
Accept Meanders (1)
Accept oxbow lakes (1)
[ANY ONE] (1 x 1) (1)

2.3.4 a. Upper course (1) (1 x 1) (1)

State b. Vertical / downward erosion (2) (1 x 2) (2)



2.3.5 HOW DOES EROSION CAUSE RETREAT OF WATER? FALL
The softer rock (Z) is eroded leaving the hard rock (Y) exposed (2)
Erosion/undercutting of less resistant/soft rock occurs (2)
Erosion/undercutting will create a plunge pool (2)
The resistant/hard rock (Y) is not supported by the soft rock (Z) and overhang (2)
The overhanging resistant/hard rock collapses (2)
[ANY TWO] (2 x 2) (4)

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2.3.6 Describe
Waterfalls creating knickpoints(2), which are abrupt changes in the river's gradient and profile.(2)
Knickpoints can lead to increased erosion(2)
and the formation of features like gorges and terraces, altering the river's overall slope and its path towards a more graded profile(2)
[ANY TWO] (2 x 2) (4)

2.4

2.4.1 Define
River capture (or stream piracy) takes place when a strongly eroding river (the captor stream) steals the water of a less energetic river (the captured stream) (2) **[CONCEPT]** (1 x 2) (2)

2.4.2 What type of erosion
Headward erosion (1) (1 x 1) (1)

2.4.3 Name the features
B – Misfit (1)
D – Elbow of capture (1) / (captured stream) (1)
E – Wind gap/ Dry gap (1) (3 x 1) (3)

2.4.4 State THREE conditions
One river has a steeper gradient than another (1)
One river has a larger amount of precipitation than another (1)
One river is flowing over less resistant rock (1)
One river is flowing at a lower altitude than another (1)
Headward erosion (1)
[ANY THREE] (3 x 1) (3)

2.4.5 Explain how the characteristics
Erosive power will increase because of the amount and turbulence of water added (2)
Volume of water will increase because the headwaters of captured stream is added (2)
Velocity (speed) of water will increase because more water (2) (3 x 2) (6)

PART MARKING:
Erosive power increase (1)
Volume will increase (1)
Velocity will increase (1)
[MAXIMUM 3 MARKS FOR PART MARKING]

2.5

2.5.1 Identify
Drakensberg (1) (1 x 1) (1)

2.5.2
Purify the water (1) (1 x 1) (1)

2.5.3 What caused the high E coli counts
Overflows from sewage system infrastructure manholes (1)
Illegal dumping of solid waste material (1)
Burst sewage reticulation pipelines (1)
Non-functional pump stations (1)
[ANY ONE] (1 x 1) (1)

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2.5.4 Identify
Inadequate infrastructure (2) (1 x 2) (2)

2.5.5 Suggest strategies
Better maintenance – fix leaked pipes (2)
Train personnel (2)
Increase budget (2)
Accept encourage family planning (2)
[ANY ONE] (1 x 2) (2)

2.5.6 Explain importance of sustainable
Everyone can have access to water (2) (accept examples)
River ecosystems remain healthy (2) (accept examples)
Flooding can be controlled (2) (accept examples)
Sustainable development can be maintained (2) (accept examples)
Economic and Social Stability: Water is essential for economic activities, including agriculture, energy production (hydropower),tourism and industry.(2)
Water security (2) (accept examples)
Prevent waterborne diseases (2)
Most cost effective way to purify water (2)
Reduce soil erosion (2)
[ANY FOUR] (4 x 2) (8)
[60]



SECTION B

3.1 MAP SKILLS AND CALCULATIONS

3.1.1 D. (1) (1 x 1) (1)

3.1.2 B. (1) (1 x 1) (1)

3.1.3

a) 9,3m (1) (1 x 1) (1)

b) 3,6(1)cm x 100 [Range: 3,5 – 3,8]
= 370 m (1) [RANGE: 350-380] (2 x 1) (2)

c) = $\frac{9,3}{370}$ (1) substitution

= 1: 39,78 (1) [Range: 38,7 - 41,93] (2 x 1) (2)

3.1.6 17° 16' + (1) 44'

= 18°00' West of True North (1) (2 x 1) (2)

3.1.7 Prevent to go in the wrong direction and get lost.(1). (1)
(1 x 1)

3.2 MAP INTERPRETATION

3.2.1 B (1) (1 x 1) (1)

3.2.2 a. A (1) (1 x 1) (1)

b. More artificial surfaces (1) (accept examples) (1 x 1) (1)

c. Urban heat island (1) (1 x 1) (1)

N	3.2.3	***Cancelled due to map errors***			
		a.	***Cancelled due to map errors***. (1)	(1 x 1)	(1)
		b.	***Cancelled due to map errors***	(2 x 1)	(2)
	3.2.4	2nd order (1)		(1 x 1)	(1)

3.2.5 Locate the river at **D** in block **D2**.

a. Source (1) (1 x 1) (1)
b. Vertical (1) (1 x 1) (1)
c. ***Cancelled due to map errors***. (2 x 1) (2)

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3.3 GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

3.3.1 D (1) (1 x 1) (1)

3.3.2 C (1) (1 x 1) (1)

3.3.3

a) A summary of integrated data is produced which makes it easier to analyse data to determine the best way for the location of the railway line. (2)
The slope/relief will affect the drainage of water. (2)
The underlying rock structure and the relief of the area will support the building of railway tracks. (2)
[ANY ONE] (1 x 2) (2)

b) Getting data about the earth's surface from a distance, without being in contact with the earth's surface. / Getting data from above / vertical (2)
[CONCEPT] (1 x 2) (2)

c) ***Cancelled due to map errors*** (1 x 2) (2)

[22]
TOTAL: 142

Due to Map errors the total is 142.

PLEASE CHANGE THE TOTAL ON SASMS TO BE 142 BEFORE STARTING MARKING

