



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

SENIOR CERTIFICATE EXAMINATIONS/ NATIONAL SENIOR CERTIFICATE EXAMINATIONS

GEOGRAPHY P1

2023

MARKING GUIDELINES

MARKS: 150

These marking guidelines consist of 11 pages.

MARKING PRINCIPLES FOR GEOGRAPHY- NSC NOVEMBER 2022 AND NSC/SC JUNE 2023

The following marking principles have been developed to standardise marking in all provinces.

MARKING**M**

- 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 sub-section 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

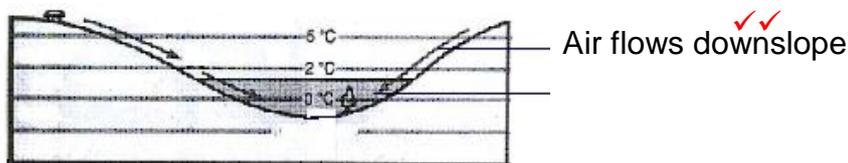
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QUESTION 1

- 1.1.1 A (South Atlantic High) (1) ✓
- 1.1.2 B (Kalahari High) (1) ✓
- 1.1.3 B (South Indian) (1) ✗ 2

- 1.2.1 Melting snow ✓
- 1.2.2 Mouth ✗
- 1.2.3 Third order ✓ 2

- 1.3.1 Katabatic ✗
- 1.3.2 1 occurs during the day while 2 occurs at night ✓✓
- 1.3.3 Cold air rolls down into the valley and forms an inversion ✓✓



- 1.4.1 Shape of front concave ✗
Steep gradient of front ✓

- 1.4.2 Warm air undercuts the cold air ✗
- 1.4.3 Air behind the cold front is colder than the air in front. Cold air moves faster than warm air ahead of it. Cold front catches up with the warm front. ✓✓ ✓✓ 7

- 1.5.1 (a) A river that only flows all year round ✗
(b) The river channel is wide ✗
(c) Regularity of rainfall and the soil type over which the streams flow. ✓✓ ✓✓

- 1.5.2 Gauteng and the Eastern Cape ✗

- 1.5.3 The cost of food production will increase as it is costly to buy purified water. Farmers will have to buy more chemicals to purify water. Chemicals cost a lot and this will increase production costs. It will be costly to purify water for use in electricity generation. These costs will be included in electricity prices. Costs will increase the price of electricity during production. M There will be less clean water to generate hydro- electricity. 13

SECTION A: CLIMATE AND WEATHER AND GEOMORPHOLOGY**QUESTION 1: CLIMATE AND WEATHER**

- | | | | | |
|-----|-------|-------|---------|-----|
| 1.1 | 1.1.1 | D (1) | | |
| | 1.1.2 | B (1) | | |
| | 1.1.3 | A (1) | | |
| | 1.1.4 | C (1) | | |
| | 1.1.5 | B (1) | | |
| | 1.1.6 | A (1) | | |
| | 1.1.7 | B (1) | | |
| | 1.1.8 | B (1) | (8 x 1) | (8) |
| 1.2 | 1.2.1 | Z (1) | | |
| | 1.2.2 | Y (1) | | |
| | 1.2.3 | Y (1) | | |
| | 1.2.4 | Z (1) | | |
| | 1.2.5 | Z (1) | | |
| | 1.2.6 | Y (1) | | |
| | 1.2.7 | Z (1) | (7 x 1) | (7) |

1.3	1.3.1	Winter (1)	(1 x 1)	(1)
	1.3.2	(10/12/13) June /Date (1)		
	EVIDENCE FROM EXTRACT	Cold fronts in the interior of Western/Eastern Cape (1) High amounts of rainfall (1) Significant drop in temperature (1)		
		[ANY ONE]	(1 x 1)	(1)
	1.3.3	Northward movement of the high pressure belts (anticyclones)/ITCZ (2)		
	WHY A GREATER IMPACT		(1 x 2)	(2)
	1.3.4	Backing (1)	(1 x 1)	(1)
	1.3.5	(The wind direction associated with the cold front will) change from north-west to south-west as the front moves over the Western Cape (2)		
	REASON		(1 x 2)	(2)
	1.3.6	Positive: Brings much needed moisture to the soil (2) Revival of biodiversity/ecosystem/habitat (2) Water available for wildlife (2) Water available for growth of natural vegetation (2) Water allows for more grazing land/veld (2) Fill up (by infiltration) natural aquifers/springs/groundwater (2) Fill up (via surface runoff) rivers (2)		
	SUGGEST POSITIVE AND NEGATIVE IMPACTS OF HEAVY RAINFALL ON PHYSICAL (NATURAL) ENVIRONMENT	Negative: (Low-lying) areas are flooded (2) Soil erosion will increase (2) Destruction of biodiversity/ecosystem/habitat (2) Damage to natural vegetation (2) Loss of wildlife (2) Increase salination of rivers (2) Saturation of soil (waterlogged conditions) (2) Rock falls/mass movements on steeper slopes (2)		
		[ANY FOUR, RESPONSES MUST REFER TO BOTH POSITIVES AND NEGATIVES]	(4 x 2)	(8)
1.4	1.4.1	Clockwise movement of air (1)		
	EVIDENCE FOR SH	Position of the leading left quadrant (1) Wind direction shown by the symbol of the eye (1)		
		[ANY ONE]	(1 x 1)	(1)
	1.4.2	Pressure in the centre is significantly below 1000 hPa (1)		
	TWO REASON FOR MATURE STAGE	Well-developed eye (1) The area covered by the tropical cyclone is large (450km- 950km) (1) The leading left quadrant (dangerous semicircle) is visible (1) Isobars are closely spaced/pressure gradient is very steep (1)		
		[ANY TWO]	(2 x 1)	(2)

1.4.3 INFLU ON CLOUD COVER	There will be no cloud cover/clear skies (2)	(1 x 2)	(2)
1.4.4 REASON FOR ANSWER	Descending air heats up resulting in no condensation (2) Adiabatic heating reduces moisture/becomes dry (2) [ANY ONE]	(1 x 2)	(2)
1.4.5 RELATION SHIP-WIND SPEED AND AIR PRESSURE	(a) Air pressure decrease and wind speed increases (2) (b) Both air pressure and wind speed decreases (2)	(2 x 2)	(4)
1.4.6 WHY ISOBARIC REPRESENT ATION REFERRED TO LEFT HAND QUADRANT	It experiences the most intense weather conditions (accept examples of severe weather conditions) (2)	(1 x 2)	(2)
1.4.7 HOW LEFT HAND QUADRANT DEVELOPS	When the forward movement combines with the rotation of the system (2)	(1 x 2)	(2)
1.5.1	A South Atlantic (1) B South Indian (1)	(2 x 1)	(2)
1.5.2	Summer (1)	(1 x 1)	(1)
1.5.3 GIVE REASON FOR SUMMER	Line thunderstorms (heavy rainfall) occur in the interior (2) Cumulonimbus clouds/lightning/hail (2) Moisture front developed (2) Air from the east/west reaches the interior (2) [ANY ONE]	(1 x 2)	(2)
1.5.4 WHAT IS A MOISTURE FRONT	The boundary (dry line) between two air masses of different moisture content (2) [CONCEPT]	(1 x 2)	(2)
INSTRUCTION FOR PART MARKING			
	The boundary (dry line) between two air masses (1)		
1.5.5	(Heavy) Rainfall (1) Hail (1) Thunderstorms (1) [ANY TWO]	(2 x 1)	(2)
1.5.6 DESCRIBE THE FORMATION OF LINE THUNDER STORM	Convergence of warm moist air and cold dry air (2) Moisture front develops (2) Cold dry air undercuts warm moist air (2) Warm moist air rises (2) Condensation occurs in the eastern side of the moisture front (2) Cumulonimbus clouds develops (2) [ANY THREE]	(3 x 2)	(6) [60]

QUESTION 2 - GEOMORPHOLOGY

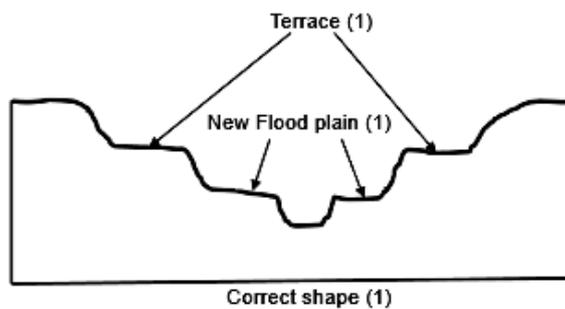
	2.1.1	C (1)		
	2.1.2	A (1)		
	2.1.3	D (1)		
	2.1.4	B (1)		
	2.1.5	C (1)		
	2.1.6	B (1)		
	2.1.7	B (1)		
	2.1.8	C (1)	(8 x 1)	(8)
2.2	2.2.1	Z (1)		
	2.2.2	Y (1)		
	2.2.3	Y (1)		
	2.2.4	Y (1)		
	2.2.5	Z (1)		
	2.2.6	Z (1)		
	2.2.7	Y (1)	(7 x 1)	(7)
2.3	2.3.1	Upper (1)	(1 x 1)	(1)
	2.3.2	Deep valleys (2)		
		Narrow/V-shaped valley (2)		
		Steep slopes (2)		
		Gorge (2)		
		Interlocking spurs (2)		
		Vertical erosion is dominant (2)		
		[ANY TWO]	(2 x 2)	(4)
	2.3.3	A body of water's/river falling over hard rock/steep slope/vertical cliff (2)		
		[CONCEPT]		
			(1 x 2)	(2)
		INSTRUCTION FOR PART MARKING		
		A body of water's/river falling over (1)		
	2.3.4	Y- resistant/hard rock (1)		
		Z- less resistant/ soft rock (1)	(2 x 1)	(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 THREE] (3 x 2) (6)

2.4 2.4.1 WHAT IS REJUVENATION
A process where a river **regains energy** (and begins to erode vertically/downwards again) (2)
[CONCEPT] (1 x 2) (2)

2.4.2 STATE TWO CAUSES OF REJUVENATION
Change in gradient (1) **OR**
(Accept Isostatic uplift (1) and/or Drop in sea level (1))
Increase in the volume of water (1) **OR**
(Accept Increase in rainfall (1) and/or River capture (1))
Joining of a faster tributary (1)
[ANY TWO] (2 x 1) (2)

2.4.3 CROSS-SECTION OF REJUVENATED VALLEY



Mark distribution

Mark for correct shape of cross section (1)
Mark for indicating new flood plain on cross-section (1)
Mark for indicating ANY ONE Terrace on cross-section (1) (3 x 1) (3)

2.4.4 FORMATION OF RIVER TERRACES
A rejuvenated river cuts into the valley floor (2)
Downcutting creates a new flood plain (2)
A step forms between the old and new flood plains (2)
[ANY TWO] (2 x 2) (4)

2.4.5 EXPLAIN HOW LANDSCAPE NEGATIVELY IMPACTED INFRASTRUCTURE DEVELOPMENT
Steepness of slopes will hamper construction of roads/railway lines (2)
Softness of the underlying rocks causes instability to roads/ railway construction (2)
Terraces make it costly to build bridges (2)
Wide flood plain makes it difficult to build bridges (2)
[ANY TWO] (2 x 2) (4)

INSTRUCTION FOR PART MARKING- MAXIMUM OF TWO

Steepness of slopes (1)
Softness of the underlying rocks (1)
Terraces (1)
Wide flood plain(1)

2.5	2.5.1 <small>CAUSE FOR BLACK COLOUR RIVER</small>	Coal mine waste have spilled into rivers (1) Polluted mine waste burst from a slurry dam (1) [ANY ONE]	(1 x 1)	(1)
	2.5.2	Arsenic copper (1) Lead (1) Manganese (1) [ANY TWO]	(2 x 1)	(2)
	2.5.3 <small>QUOTE MINING COMPANY DID NOT DISCLOSE</small>	"the residents of the affected communities were not warned about the potential hazards until two weeks later" (2) "Conservation managers in the neighboring Hluhluwe – Imfolozi Game Reserves were also made to believe that the spill was under control " (2) [ANY ONE]	(1 x 2)	(2)
	2.5.4 <small>NEGATIVE ECONOMIC IMPACT OF NON DISCLOSURE</small>	Eco-tourism affected (2) Businesses in the community negatively affected (2) Agricultural activities negatively affected (2) Future investments in the communities limited (2) Contamination of agricultural products (2) Increase in medical bills (2) (Water) purification is expensive (2) [ANY ONE]	(1 x 2)	(2)
	2.5.5 <small>DESCRIBE THE ENVIRONMENTAL IMPORTANCE OF MANAGING IMFOLOZI SUGGEST MEASURES LOCAL MUNICIPALITY CAN IMPLEMENT TO MAINTAIN FUTURE QUALITY OF WATER</small>	IMPORTANCE: To ensure the availability of water (2) To maintain water quality (2) To preserve aquatic life (2) To ensure that the ecosystem remains healthy (2) To preserve biodiversity/ecosystem/habitat (2) MEASURES: Continuous monitoring of the dam (2) Regular maintenance of the dam (2) Frequent testing of water quality (2) Impose fines to companies which do not comply (with regulation) (2) Create buffer zone around slurry dam (2) Educate community on the precautionary measures (2) Awareness campaigns for people (bill boards, no dumping site signs) (2) Implement policy/legislation (2) Conserve natural vegetation in the drainage basins (2) Regulate or control extraction of groundwater (2) Promote sustainable farming methods upstream (2) [ANY FOUR, RESPONSES MUST INCLUDE BOTH THE IMPORTANCE AND MEASURES]	(4 x 2)	(8) [60]
TOTAL SECTION A:				120

SECTION B

QUESTION 3: GEOGRAPHICAL SKILLS AND TECHNIQUES

3.1	3.1.1	B (1)		(1 x 1)	(1)
	3.1.2	D (1)		(1 x 1)	(1)
	3.1.3	VI = 1463 - 1183.3 = 279.7 (1) m			
		$\frac{VI = 279.7}{HE = 3000}$ (1) for correct substitution			
		Gradient = 1: 10.72 (1)		(3 x 1)	(3)
	3.1.4	The gradient is steep (1) There are a number of valleys/ivers (1) There are a number of spurs (1) There is an excavation close by (1) [ANY TWO]	<small>EVIDENCE FOR DIFFICULTY TO CONSTRUCT ROAD</small>	(2 x 1)	(2)
	3.1.5	(a) 1: 20 x 100 = 2000 (1) 1: 2000 (1)		(2 x 1)	(2)
		(b) The cross-section (of the topographic map) has been vertically exaggerated by 5 times/The cross-section is 5 times larger (1)		(1 x 1)	(1)
3.2	3.2.1	C (1)		(1 x 1)	(1)
	3.2.2	Built-up areas (1) Road (1) [ANY ONE]	<small>IDENTIFY HUMAN MADE FEATURE</small>	(1 x 1)	(1)
	3.2.3	More heat is generated (accept examples) (2) The built-up area absorbs more heat (accept examples) (2) Multiple reflections (2) Storm water drainage (2) [ANY ONE]	<small>EXPLAIN YOUR ANSWER</small>	(1 x 2)	(2)
	3.2.4	Woodlands/trees (1) Rivers/ water (1) Open spaces (1) [ANY ONE]	<small>IDENTIFY NATURAL FEATURE</small>	(1 x 1)	(1)
	3.2.5	C (1)		(1 x 1)	(1)
	3.2.6	Gentle slope (flat land) (2) Surrounding high-lying area creates safety (2) Surrounding high-lying area will buffer the noise (2) [ANY ONE]	<small>HOW RELIEF FAVOURS LOCATION</small>	(1 x 2)	(2)

	3.2.7	The settlement is away from the dam (2) The woodland forms a buffer (2) Most tributaries feeding the dam have their origin in high-lying areas with no human activities (2) [ANY TWO]	(2 x 2)	(4)
3.3	3.3.1	B (1)	(1 x 1)	(1)
	3.3.2	C3 (1)	(1 x 1)	(1)
	3.3.3	Name of the monument (1) The date of birth and death of Diederich Coetzee (1) Height of the monument above sea level (1) [ANY ONE]	(1 x 1)	(1)
	3.3.4	Personnel/ people/ user (1)	(1 x 1)	(1)
	3.3.5	Manipulate the data (2) Input of data (2) Use appropriate GIS methods (2) Make information more accessible to users (2) Make information more understandable for users (2) Acquires the soft and hardware to be used (2) Acquire/collect data (2) [ANY ONE]	(1 x 2)	(2)
	3.3.6	Different maps were integrated into one map (2)	(1 x 2)	(2)
			TOTAL SECTION B:	30
			GRAND TOTAL:	150