education

Department of
Education
FREE STATE PROVINCE

GEOGRAPHY

TEST ONE

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GRADE 11

MARCH 2026

MARKING GUIDELINE

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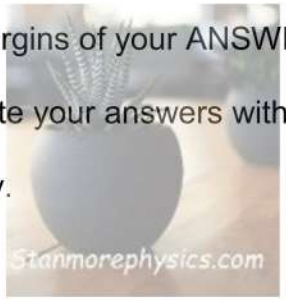
This Marking Guideline consists of 6 pages

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INSTRUCTIONS AND INFORMATION

1. Answer ALL the questions.
2. Answer the paragraph questions in the form of a paragraph.
3. ALL diagrams are included in the in the question paper.
4. Leave a line between subsections of questions answered.
5. Number the answers correctly according to the numbering system used in this question paper.
6. Do NOT write in the margins of your ANSWER BOOK.
7. Where possible, illustrate your answers with labelled diagrams.
8. Write clearly and legibly.



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QUESTION 1

1.1 The significance of the earth 's axis

1.1.1 B (1x1) (1)

1.1.2 C (1x1) (1)

1.1.3 C (1x1) (1)

1.1.4 B (1x1) (1)

1.1.5 D (1x1) (1)

1.1.6 A (1x1) (1)

1.1.7 D (1X1) (1)

(7)



1.2 Drought

1.2.1 a long period without rain (1x1) (1)

1.2.2 drought (1x1) (1)

1.2.3 location of the high pressures (1x1) (1)

1.2.4 decreased access to safe drinking water (1x1) (1)

1.2.5 economy (1x1) (1)

1.2.6 reduced crop yields (1x1) (1)

1.2.7 waterborne diseases (1x1) (1)

1.2.8 **d**rought awareness (1x1) (1)

(8)



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1.3 Global circulation

Identify pressure belt at A

1.3.1 a) Equatorial low-pressure belt (1) (1x1) (1)

what do we call the zone where two sets of Tropical Easterlies converge ?

1.3.2 ITCZ (1) (1x1) (1)

(a)Identify the planetary wind that develops at **E**.

1.3.3 a) Westerlies (1) (1x1) (1)

(b) how has Coriolis force affected the winds identified in 1.3.3 a

b) (1X2) (2)

- According to Ferrel's law wind is deflected to the left in the Southern hemisphere and to the right in the Northern hemisphere (2)
- Coriolis force has changed wind direction of the winds from northerly winds to westerlies(2)

ANY ONE (1x2)(2)

re- draw the table below and compare the pressure system dominant at the area at 30°and 60° south of the equator

1.3.4 (4x1) (4)

	At 30° South	**At 60° South**
Rotation of air	Anticlockwise (1)	Clockwise(1)
Rising or descending air	Descending. (1).	Rising . (1)

Describe how cell F develops?

1.3.5 (3x2) (6)

- Intense equatorial heating causes air to rise creating a low-pressure area.(2)
- As air rises it cools and the water vapour condenses, forming clouds and precipitation, air descends near 30^0 latitudes to form subtropical high pressure. (2)
- Air return to the equator as Tropical Easterlies. (2)
- This cell creates tropical rain along equator and deserts around 30^0(2)

ANY TWO (3X2) (6)

[15]

1.4 Fohn winds

concept

1.4.1 Föhn wind – Warm dry wind that descend on the leeward side of a mountain (2) (1x2) (2)

fohn wind in South Africa

1.4.2 Berg Wind (1) (1x1) (1)

Refer to the sketch above to answer the following questions: Label A and B respectively

1.4.3 A- Wet adiabatic lapse rate (1)
B- Dry adiabatic lapse rate (1) (2x1) (2)

briefly explain why the temperature of the descending air on the leeward side is higher (15°C) than temperature on the windward side?

1.4.4 The temperature increases by 1 °C/100 m as the air descends.(2)
Moisture evaporates as the air descends (2)

ANY ONE (1x2)(2) (1x2) (2)

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impact of Fohn winds on the leeward side of thee mountain

1.4.5 **NEGATIVE IMPACT**: (4x2) (8)

- Dry, gusty winds will dry out vegetation and ignite fires (2)
- Melting of snow resulting in avalanches (2)
- Melting of snow resulting in flooding (2)
- Flooding may destroy biodiversity (2)
- Flooding may cause soil erosion (2)
- Fires may cause destruction of the ecosystem (2)
- Strong winds will cause soil erosion (2)

POSITIVE IMPACT:

- Fires may cause germination of seeds (2)
- Flooding will fill up the dams (2)

- Can refer to both negative and positive impact

ANY FOUR (4x2)(8)

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1.5 Synoptic weather map

what season is indicated by the weather map?

1.5.1 Summer(1) (1x1) (1)

provide TWO pieces of evidence from the synoptic weather map to support your answer in 1.5.1 above.

1.5.2 Presence of low-pressure cell in the interior. (2) (2x1) (2)
The high-pressure cells have migrated southwards. (2)
Weather stations in the interior show high cloud cover. (2)
The cold front passes south of the country. (2)
High land temperatures in the interior (2)

ANY TWO (2x1)(2)

a) how is the air pressure at A?

1.5.3 a) High pressure(1) (1x1) (1)

b) give a reason for your answer in 1.5.3 (a)

b) The atmospheric pressure increases towards the centre of the cell.(2) (1x2) (2)



a)Which area **B-B** or **C-C** is experiencing high wind speeds?

1.5.4 a) **B-B** (1x2) (2)

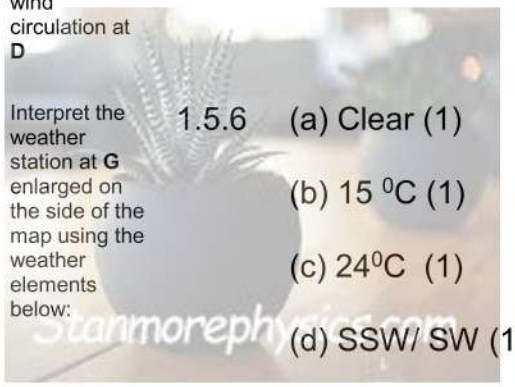
b) justify your answer in 1.5.4 a)

b) B-B shows isobars that are close together indicating a steep pressure gradient (2) (1x2) (2)

describe the wind circulation at **D**

1.5.5 Clockwise in the Southern Hemisphere (1) (1x1) (1)

Interpret the weather station at **G** enlarged on the side of the map using the weather elements below:



1.5.6 (a) Clear (1) (1x1) (1)

(b) 15 ^{0}C (1) (1x1) (1)

(c) 24^{0}C (1) (1x1) (1)

(d) SSW/ SW (1) (1x!1) (1)

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TOTAL 60

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