BERGVLIET HIGH SCHOOL

GEOGRAPHY
PAPER 1

GRADE 11 FINAL EXAMINATION

NOVEMBER 2025

MARKS: 150	TIME: 3 HOURS
EXAMINER:	MR B. JOHNS
MODERATOR:	MS J. KNOTT

MARKING GUIDELINES

SECTION A: CLIMATE AND WEATHER AND GEOMORPHOLOGY

QUESTION 1: CLIMATE AND WEATHER

1.1.1 **0°** ✓

1.1.2 **Sub-polar Low** ✓

1.1.3 **B** ✓

1.1.4 **Tropical easterly** ✓

1.1.5 **30°S** ✓
90°S

1.1.6 **F** ✓

1.1.7 **Ferrel** ✓

1.1.8 **ITCZ** ✓ (8 x 1) (8)

1.2.1 **B** ✓ pressure gradient force

1.2.2 **C** ✓ Air pressure decreases as temperature increases.

1.2.3 **B** ✓ (i) and (iv) converging and clockwise

1.2.4 **C** ✓ rotation of the earth.

1.2.5 **B** ✓ Geostrophic

1.2.6 **A** ✓ energy balance

1.2.7 **C** ✓ terrestrial radiation. (7 x 1) (7)

1.3.1 **High** ✓ (1 x 1) (1)

1.3.2 **Pressure increasing towards the centre**. ✓✓
Highest pressure at centre of the cell. (1 x 2) (2)

1.3.3 **1012** ✓ hPa (1 x 1) (1)

1.3.4 **South Indian** ✓ HP (1 x 1) (1)

1.3.5 **Warm** ✓
Moist ✓ (2 x 1) (2)

1.3.6 **Y = Cape Town** ✓
Z = East London ✓ (2 x 1) (2)

1.3.7 **Overcast** conditions. ✓✓
Rain (as precipitation). ✓✓
Cold front conditions being experienced.
Wind direction is SW.
Colder temperatures.
Stronger wind (wind speed of 30 knots) (2 x 2) (4)

1.3.8 **25** ✓ **knots** ✓ (2 x 1) (2)

1.4.1 A **seasonal reversal in the wind direction** ✓ and an accompanying **change in weather conditions.** ✓ (2 x 1) (2)

1.4.2 **ITCZ is further north** on map. ✓ (1 x 2) (2)

1.4.3 Average = $\frac{2\,719}{\mathbf{12}}$ ✓ = **226.58** ✓ mm (2 x 1) (2)

1.4.4 **January** ✓
February
March
November
December (1 x 1) (1)

1.4.5 Port Harcourt is **south of the ITCZ year-round**. ✓✓
Maritime winds blow over Port Harcourt year-round. ✓✓ (2 x 2) (4)

1.4.6 High risk of **flooding**. ✓✓
Greater **soil erosion/loss of topsoil**. (1 x 2) (2)

1.4.7 **Timbuktu receives seasonal rainfall**/ only at certain times of year, while **Port Harcourt has rainfall throughout the year**. ✓✓ (1 x 2) (2)

1.5.1 Periods of **below average rainfall**. ✓✓
Shortage of rainfall causing human activities/environment to be negatively impacted (accept examples).

[Concept]

[**NB**: Cannot simply say little/low rainfall] (1 x 2) (2)

1.5.2 Crops are **damaged/destroyed**.
Crop **loss/lower yield**.
Crop is **dying/wilting**. (1 x 1) (1)

1.5.3 People in poorer countries are **heavily dependent on subsistence farming**. ✓✓
Poorer countries **lack the budget to import sufficient food**. ✓✓
Poorer countries often **don't have access to science/technology** to ensure food security (accept examples like hybrid seeds and GM).
Poorer countries **don't have the necessary resources to mitigate impacts** of droughts. (2 x 2) (4)

1.5.4 **Plan/build water storage facilities** (dams; reservoirs). ✓✓
Manage rivers/drainage basins. ✓✓
Maintain/conserve wetlands. ✓✓
Conserve/limit use of ground water sources. ✓✓
Reduce contamination/pollution of water sources.
Educate/create awareness on importance of water conservation.
Water restrictions in certain areas/at certain times.
Water saving measures inside homes (**award marks for each example**).
Water transfer schemes.
Address climate change/global warming (accept examples if linked to rainfall). (4 x 2) (8)

[60]

QUESTION 2: GEOMORPHOLOGY

2.1.1

A	B
Dip slope ✓ **Hard layer** ✓	**Scarp slope** ✓ **Soft layer** ✓

(4 x 1) (4)

2.1.2 **Inclined** ✓

2.1.3 **Faulting** ✓

2.1.4 **Cuesta** ✓

2.1.5 **True** ✓ (4 x 1) (4)

2.2.1 **D** ✓

2.2.2 **C** ✓

2.2.3 **F** ✓

2.2.4 **G** ✓

2.2.5 **E** ✓

2.2.6 **D** ✓

2.2.7 **E** ✓ (7 x 1) (7)

2.3.1 **Karoo** ✓ (1 x 1) (1)

2.3.2 **Dolerite** ✓ (1 x 1) (1)

2.3.3 **Erosion** ✓
Slope retreat (1 x 1) (1)

2.3.4 Similar: **Horizontally layered**/**horizontally stratified** rock. ✓✓
Difference: **Cap rocks**/tops **have different areas**/**sizes**. ✓✓ (2 x 2) (4)

2.3.5 Protective **cap rocks are continually being eroded**/will be eroded/removed.
Remaining landform/**conical hill will be eroded**/**disappear**. (2 x 2) (4)

2.3.6 **Crop farming is limited**/not possible/soil too dry/soil too thin.
Sheep farming/livestock farming is common in Karoo. (2 x 2) (4)

2.4.1 **Igneous** ✓ (1 x 1) (1)

2.4.2 **Magma** ✓ (1 x 1) (1)

2.4.3 **Batholith** ✓ (1 x 1) (1)

2.4.4 **Magma solidified** into an igneous intrusive form/batholith. ✓✓
Intrusive form/**batholith is covered by soil**/earth/overlying rock. ✓✓
Overlying layers removed to expose landform/dome at Earth's surface. ✓✓ (3 x 2) (6)

2.4.5 **Tors** ✓ (1 x 1) (1)

2.4.6 **Paarl Mountain** ✓ (1 x 1) (1)

2.4.7 **Tourist attraction** (tourist income).
Job creation in tourism/leisure sector. (2 x 2) (4)

2.5.1 The **mass movement of earth/soil down a slope** (under influence of gravity).

[Concept] (1 x 2) (2)

2.5.2 **Heavy rainfall**.
300mm of rain.

[**NB**: Cannot just say rainfall; emphasis on heavy/high amount] (1 x 1) (1)

2.5.3 Rain **lubricates/adds moisture to soil** ✓ [Factor]
causing it to become **more fluid/liquid**. ✓ [Qualifier]

[**NB**: No mark if only qualifier is given]. (1 x 2) (2)

2.5.4 **Certain areas** (hill pockets) **are difficult to reach**/access. ✓
Many different areas/people required help. ✓
People are trapped under debris.
Roads/bridges/access points have been washed away. (2 x 1) (2)

2.5.5 **Avoid modifying/altering slopes**.
Avoid building settlements at the base of unstable slopes.
Metal bolts to keep loose rocks in place.
Avoid removing natural vegetation/**Plant vegetation** to stabilise slope.
Metal nets to catch falling rocks.
Retaining walls to minimise movement of soil.
Improve drainage on slopes to minimise slopes becoming water-logged.
Over-head canopies/cantilever canopies.
Monitor slope stability.
Evacuation/emergency plan in event of earthquakes. (4 x 2) (8)

[60]

TOTAL SECTION A: 120

SECTION B

QUESTION 3: GEOGRAPHICAL SKILLS AND TECHNIQUES

3.1 **MAP SKILLS AND CALCULATIONS**

3.1.1 **B** ✓ Limpopo (1 x 1) (1)

3.1.2 **C** ✓ 2430BB (1 x 1) (1)

3.1.3 **16 m** ✓ (1 x 1) (1)

3.1.4 **980** ✓ m (1 x 1) (1)

3.1.5 Average Gradient = $\frac{16}{980}$ ✓ = **1 : 61.25** ✓ (2 x 1) (2)

3.1.6 Breadth = **16.9 cm** ✓ x 0.5 [Accept: 17 cm]
= **8.45 km** ✓ [Accept: 8.5 km]

Area = **9.25 x 8.45** ✓ [Accept: 9.25 x 8.5]
= **78.16** ✓ km² [Accept: 78.62 - 78.63] (4 x 1) (4)

3.2 **MAP INTERPRETATION**

3.2.1 **B** ✓ (1 x 1) (1)

3.2.2 **D** ✓ conical hill. (1 x 1) (1)

3.2.3 **Soil creep** ✓
Rock fall
Slump
Landslide

[**NB**: Do not accept solifluction as it requires lubrication/vegetation] (1 x 1) (1)

3.2.4 Spacing indicates **level/flat land**. ✓✓
Contour lines are spaced far apart showing land is flat.
Feature 6 requires flat/level ground. (1 x 2) (2)

3.2.5 Range = **26 - 9** ✓
= **17°C** ✓ (2 x 1) (2)

3.2.6 **Summer** ✓ (1 x 1) (1)

3.2.7 **Low amounts of vegetation**/forests. ✓✓
Limited planting of crops (mainly close to rivers).
Many non-perennial rivers. (1 x 2) (2)

3.2.8 **Storage dams** ✓✓
Reservoirs
Water towers
Water points
Economic activities that are not too dependent on water (1 x 2) (2)

3.3 **GEOGRAPHICAL INFORMATION SYSTEMS (GIS)**

3.3.1 **Y** ✓ data

3.3.2 **Y** ✓ oblique

3.3.3 **Y** ✓ raster (3 x 1) (3)

3.3.4 **Airport** ✓
Landing strip
Roads (accept names/examples)
Monuments
Recreational facilities (1 x 1) (1)

3.3.5 **Polygon** ✓
Area (1 x 1) (1)

3.3.6 **Hospital** ✓ (1 x 1) (1)

3.3.7 **Settlement** (people/built-up area/dense population).
Transport (roads)
Land/space
Existing infrastructure (of same kind).
Topography/relief/slope/level ground (1 x 2) (2)

[30]

TOTAL SECTION B: 30

GRAND TOTAL: 150