BERGVLIET HIGH SCHOOL

GEOGRAPHY PAPER 2

GRADE 10 FINAL EXAMINATION

NOVEMBER 2024

MARKS: 150	TIME: 3 HOURS
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MARKING GUIDELINES

QUESTION 1: POPULATION GEOGRAPHY

1.1.1 51% ✓

1.1.2 Males ✓

1.1.3 Matric ✓

1.1.4 Coloured ✓

1.1.5 Increased ✓

1.1.6 17.6 % ✓

1.1.7 Smaller ✓

1.1.8 Census ✓ (8 x 1) (8)

1.2.1	G	✓	Xenophobia	
1.2.2	E	✓	Transhumance	
1.2.3	A	✓	Urbanisation	
1.2.4	J	✓	Distribution	
1.2.5	C	✓	War	
1.2.6	H	✓	Fertility Rate	
1.2.7	B	✓	Emigration	(7 x 1) (7)

1.3.1 People / km² ✓ (1 x 1) (1)

1.3.2 51 – 200 ✓ people/km² (1 x 1) (1)

1.3.3 Greenland ✓ (1 x 1) (1)

1.3.4 Sparsely ✓ (1 x 1) (1)

1.3.5 Very cold climate throughout the year. ✓✓ (1 x 2) (2)

1.3.6 Desert climate. ✓✓

Very low amounts of rainfall (dry). ✓✓

Temperature extremes (very hot day and/or very cold nights). (2 x 2) (4)

1.3.7 India ✓ (1 x 1) (1)

1.3.8 India has a very large population. ✓✓

Population is large relative to the area of the country. ✓✓

High birth rates.

Lack of sufficient family planning/contraception.

Cultural/religious factors encourage early marriage/big families. (2 x 2) (4)

1.4.1 Very small percentage of elderly (70+). ✓✓
Relatively narrow top of pyramid. (1 x 2) (2)

1.4.2 Limited access by people to adequate healthcare (medicine; hospitals). ✓✓
Unsafe/unhygienic living conditions.
Poverty/food insecurity contributes to lower life expectancy.

[Accept other relevant responses] (1 x 2) (2)

1.4.3 4.1 % ✓ [Accept: 4.2%] (1 x 1) (1)

1.4.4 Increased ✓ by **± 0.5%** ✓ [Accept: 0.4 0.6] (2 x 1) (2)

1.4.5 There has been a decline in the birth rates (for both male and female). ✓✓
Birth rate for males and females appear relatively equal for both years. ✓✓
2022 female birth rate (0-4) slightly less than male birth rate

Families are smaller due to cost of living. ✓✓
More women have careers so have fewer children. ✓✓
Better use/knowledge of contraception. (4 x 2) (8)

1.5.1 Rural-urban migration ✓ (1 x 1) (1)

1.5.2 Push factors drive people away ✓
Pull factors attract people to an area**.** ✓ (2 x 1) (2)

1.5.3 a) Few job opportunities. (lack of variety/unemployment).✓
Low paying jobs (low salaries). ✓
Closure of businesses
Low productivity. (2 x 1) (2)

b) Lack of entertainment/social contact. ✓
Poverty ✓
Lack of basic services and facilities (accept examples). (2 x 1) (2)

1.5.4 Soil erosion ✓ causes crop losses/low productivity/loss of income**.** ✓
Drought ✓ results in crop losses/loss of income**.** ✓
Floods destroy crops and cause financial losses**.**
Global warming creates dry soil conditions (reduced productivity). (2 x 2) (4)

1.5.5 Unemployment/lack of job opportunities. ✓✓

Housing shortages**.** ✓✓

Poverty (no steady source of income).

Limited access to education and medical care (over-subscribed)

Possible targets of/involvement in crime/criminal activity.

Lack of required skills to fill urban job vacancies. (2 x 2) (4)

[60]

QUESTION 2: WATER RESOURCES

2.1.1 Bar ✓

2.1.2 46 ✓

2.1.3 Urban ✓

2.1.4 Lag time ✓

2.1.5 Rising limb ✓

2.1.6 Falling limb ✓

2.1.7 Base flow ✓

2.1.8 Peak discharge ✓ (8 x 1) (8)

2.2.1 B ✓ evaporation.

2.2.2 A ✓ summer.

2.2.3 D ✓ Water is moved from areas with a low supply.

2.2.4 A ✓ Lesotho Highlands Project

2.2.5 C ✓ Senqu River → Katse Dam → Ash River → Vaal Dam

2.2.6 D ✓ episodic

2.2.7 C ✓ (ii) and (iii)

(7 x 1) (7)

2.3.1 103 % ✓ (1 x 1) (1)

2.3.2 '…try to use less than 105 litres per person per day.' (1 x 1) (1)

2.3.3 Water is required for domestic use (accept examples). ✓✓
Industrial activity requires lots of water. ✓✓
Agriculture farming requires water as rain is seasonal.
Cape Town experiences summer veldfires. (2 x 2) (4)

2.3.4 Municipal water can only be used to water gardens before 9:00 and after 18:00. ✓
Paving not to be hosed down using municipal water. (1 x 1) (1)

2.3.5 Shower as opposed to taking a bath. ✓✓
Have shorter showers. ✓✓
Do not keep water running while brushing teeth. ✓✓
Do not flush each time the toilet is used. ✓✓
Place a brick in the cistern to limit water use.
Catch rainwater and store in a jo-jo tank.
Ensure that taps are tightly closed.
Fix any leaking taps/pipes.
Use a bucket when washing the car instead of a hose.
Limit the number of times the dishes/clothes are washed.
Recycle used water.
Gather water from nearby streams/waterfalls.

[Accept other relevant learner responses]. (4 x 2) (8)

2.4.1 Provide water services to households. ✓
Provide sanitation services to households.
Responsible for water purification.
Responsible for wastewater treatment. (1 x 1) (1)

2.4.2 45.2 % ✓ (inside home) and 9.7 % ✓ (from public tap) (2 x 1) (2)

2.4.3 Water supply infrastructure is expensive/costly. ✓✓
Consumers do not always pay their municipal water bills**.** ✓✓
Certain parts of the country are remote (difficult to reach).
Installing necessary water supply infrastructure is time-consuming.
Buying water from water boards is often costly.
Water supply infrastructure may be old and in need of repair.
Unplanned settlements place an added burden on water supply.
Growing population requires an additional supply. (2 x 2) (4)

2.4.4 2.6%: borehole water ✓
20.1%: municipal water tanker. ✓ (2 x 1) (2)

2.4.5 Water for drinking/consumption/cooking is not available. ✓✓

Inability to flush toilets (health hazard/unhygienic). ✓✓

Households may be unable to wash clothing (may have to wear dirty clothing). ✓✓

Wasting of water when taps are opened when water is cut but not closed once supply is restored (flooding of homes).

[Accept other relevant learner responses] (3 x 2) (6)

2.5.1 A river overflows its banks. ✓✓

Water covers an area that is not normally covered by water.

[Concept] (1 x 2) (2)

2.5.2 a) Loss of life (deaths) ✓

b) People missing. ✓ (2 x 1) (2)

2.5.3 Indonesia experienced 300m of rain in 6 hours ✓ which meant that there was no/little time for water to infiltrate or make its way into rivers. ✓ (2 x 1) (2)

2.5.4 130mm ✓ (1 x 1) (1)

2.5.5 Flights were delayed. ✓

Traffic stalled (major traffic congestion/standstill). ✓

Public transport was disrupted. (2 x 1) (2)

2.5.6 Flood waters had risen too high. ✓✓

Emergency services could not reach the homes. (1 x 2) (2)

2.5.7 Artificial surfaces promote surface run-off. ✓✓

Removal of natural ground cover discourages infiltration. ✓✓

Storm drains are often blocked by litter and other debris. (2 x 2) (4)

[60]

SECTION B

QUESTION 3: GEOGRAPHICAL SKILLS AND TECHNIQUES

3.1 **MAP SKILLS AND CALCULATIONS**

3.1.1 2931 CC ✓ (1 x 1) (1)

3.1.2 A ✓ (i) and (iii) (1 x 1) (1)

3.1.3 Distance = **3.55 cm** ✓ x 100 = **355** ✓ m
[Range: 350m – 360m] (2 x 1) (2)

3.1.4 257° ✓ (1 x 1) (1)

3.1.5 8 years ✓ (1 x 1) (1)

3.1.6 Total change = **8 yrs x 9'** ✓ = **72' westwards** ✓ (2 x 1) (2)

3.1.7 Magnetic declination (2024) = 25° 04' **+** ✓ 72'
= **26° 16' West of True North**. ✓ (2 x 1) (2)

3.2 **MAP INTERPRETATION**

3.2.1 51.3 % ✓ (1 x 1) (1)

3.2.2 Increasing ✓ (1 x 1) (1)

3.2.3 **D1** ✓ (1 x 1) (1)

3.2.4 Density (2015) = $\frac{73140}{22.5}$ = **3 250.7** ✓ people/km². (1 x 1) (1)

3.2.5 River (Mdloti River) ✓
Mountains/Hills ✓ [Accept**:** Steep slopes/terrain] (2 x 1) (2)

3.2.6 **Purification plant** ✓ ensures that water is **purified/recycled for re-use.** ✓
Reservoirs✓ **store water for when needed for agriculture.** ✓
Furrows lead water to crops for **irrigation** purposes. (4 x 1) (4)

3.2.7 Supplies water for human activities (accept examples: farming; industry; domestic use) ✓✓
A dam can serve as an area for recreation. (1 x 2) (2)

3.3 **GEOGRAPHIC INFORMATION SYSTEMS** (**GIS**)

3.3.1 B ✓ A component of a GIS

3.3.2 D ✓ Descriptive data

3.3.3 A ✓ Gathering information about the earth from a distance. (3 x 1) (3)

3.3.4 Airport✓ (King Shaka International Airport) (1 x 1) (1)

3.3.5 Residents have access to transport/air services. ✓✓

Job creation available at airport.

Airport can be used for educational/training purposes.

Corporate social investment (accept examples of any benefit locals derive from the airport/ACSA for example bursaries) (1 x 2) (2)

3.3.6 Level ground. ✓✓

Space for expansion.

On the outskirts/close to the built-up area.

Access to road transport/rail transport/infrastructure.

Close to industrial area (for exports).

Close to Dube Trade Port. (1 x 2) (2)

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TOTAL: 150