SMARTWIZ

GRADE10 GEOGRAPHY EXAM

MARKS: 100

MARKS	

TIME: 2 hours

SCHOOL _____

CLASS (e.g. 4A) _____

SURNAME _____

NAME _____

Instructions for Learners:

- Read all the instructions carefully before you begin the exam.
- Write your name and learner number clearly on the answer sheet/booklet.
- Answer all the questions unless otherwise instructed.
- Show all your work/calculations where applicable.
- Write neatly and legibly.
- Use only blue or black ink. *Do not use correction fluid or tape*.
- No electronic devices (calculators, phones, etc.) are allowed unless explicitly permitted.
- Raise your hand if you have any questions.
- Do not talk to other learners during the exam.
- Any form of cheating will lead to disqualification.

This test consists of 6 pages including the cover page.

SECTION A: MULTIPLE CHOICE (10 × 1 = 10 MARKS)

Choose the correct answer and write only the letter (A–D) next to the question number.

1.1 What is the main source of renewable energy in South Africa?
A. Nuclear energy
B. Wind energy
C. Solar energy
D. Fossil fuels

1.2 Which of the following is a characteristic of a topographic map?
A. Shows climate zones
B. Indicates political borders
C. Displays contour lines
D. Represents economic activities

1.3 Which layer of the Earth contains magma?
A. Crust
B. Mantle
C. Core
D. Lithosphere

1.4 Which line of latitude runs at 23.5° south?
A. Equator
B. Tropic of Cancer
C. Tropic of Capricorn
D. Antarctic Circle

1.5 The greenhouse effect is caused by:
A. Wind erosion
B. Solar flares
C. Trapped heat by gases in the atmosphere
D. Increased rainfall

1.6 Which one of the following is NOT a primary economic activity?
A. Fishing
B. Farming
C. Mining
D. Banking

1.7 A map scale of 1:50 000 means:
A. 1 cm represents 50 m
B. 1 cm represents 5 km
C. 1 cm represents 50 000 cm
D. 1 cm represents 500 km

1.8 Which instrument is used to measure wind speed?
A. Barometer

B. Thermometer
C. Anemometer
D. Rain gauge

1.9 An area with high rainfall and thick vegetation is most likely a:
A. Desert
B. Savanna
C. Tundra
D. Rainforest

1.10 The movement of people from rural to urban areas is known as:
A. Immigration
B. Urbanisation
C. Emigration
D. Industrialisation

✅ [10 MARKS]

SECTION B: MATCHING ITEMS (5 × 1 = 5 MARKS)

Match Column A with Column B. Write only the number and the correct letter.

Column A	Column B
2.1 Deforestation	A. People per square kilometre
2.2 Urban sprawl	B. Loss of trees and vegetation
2.3 Population density	C. Causes flooding and pollution
2.4 River pollution	D. Spread of cities into rural areas
2.5 Relief	E. Variation in elevation and slope

2.1 _____
2.2 _____
2.3 _____
2.4 _____
2.5 _____

✅ [5 MARKS]

SECTION C: TRUE OR FALSE (5 × 1 = 5 MARKS)

Write TRUE or FALSE next to each statement. If false, correct the statement.

3.1 Volcanoes are most commonly found near plate boundaries.

3.2 A GPS is used to measure rainfall.

_____

3.3 Contour lines that are close together indicate steep terrain.

_____

3.4 The primary sector includes manufacturing.

_____

3.5 Weather refers to short-term atmospheric conditions.

_____

✅ [5 MARKS]

_____

SECTION D: SHORT QUESTIONS (40 MARKS)

QUESTION 4: CLIMATE AND WEATHER (10 MARKS)
4.1 Define the term "weather." (2)

_____

4.2 Name any two elements of weather. (2)

_____

4.3 How do mountains affect rainfall? (3)

_____
_____

4.4 Explain one method used to measure temperature. (3)

_____
_____

QUESTION 5: PLATE TECTONICS (10 MARKS)
5.1 What is the theory of plate tectonics? (3)

_____
_____

5.2 Differentiate between convergent and divergent plate boundaries. (4)

5.3 Name any one example of a tectonic plate. (1)

5.4 State two effects of volcanic eruptions. (2)

QUESTION 6: GEOGRAPHICAL TOOLS (10 MARKS)
6.1 What is a satellite image? (2)

6.2 Explain two uses of satellite images in geography. (4)

6.3 Give the purpose of a compass on a map. (2)

6.4 What is a map legend? (2)

QUESTION 7: RURAL AND URBAN SETTLEMENTS (10 MARKS)
7.1 Define rural settlement. (2)

7.2 List two characteristics of urban settlements. (2)

7.3 Explain how transport affects settlement development. (3)

7.4 Mention one advantage and one disadvantage of urbanisation. (3)
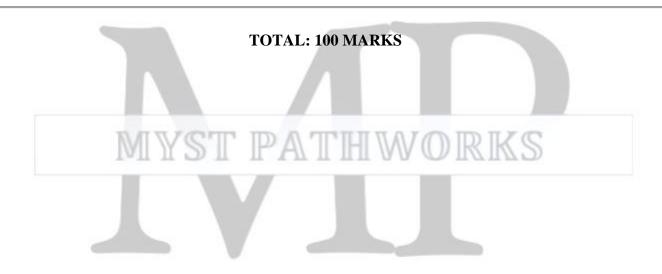
SECTION E: ESSAY (30 MARKS)

QUESTION 8
Discuss the impact of human activities on the environment. Your answer must include:

- Examples of human activities that damage the environment
- The effects of these activities on ecosystems and biodiversity
- Ways in which individuals and governments can reduce environmental damage
- Your own opinion on how to improve environmental awareness in schools

Ensure your essay has an introduction, body, and conclusion.
✅ [30 MARKS]

TOTAL: 100 MARKS

MEMO

SECTION A: MULTIPLE CHOICE (10 × 1 = 10 MARKS)

1.1 C ✔
1.2 C ✔
1.3 B ✔
1.4 C ✔
1.5 C ✔
1.6 D ✔
1.7 C ✔
1.8 C ✔
1.9 D ✔
1.10 B ✔
✅ [10 MARKS]

SECTION B: MATCHING ITEMS (5 × 1 = 5 MARKS)

2.1 B ✔
2.2 D ✔
2.3 A ✔
2.4 C ✔
2.5 E ✔
✅ [5 MARKS]

SECTION C: TRUE OR FALSE (5 × 1 = 5 MARKS)

3.1 TRUE ✔
3.2 FALSE – A GPS is used to determine location ✔
3.3 TRUE ✔
3.4 FALSE – The secondary sector includes manufacturing ✔
3.5 TRUE ✔
✅ [5 MARKS]

SECTION D: SHORT QUESTIONS (40 MARKS)

QUESTION 4: CLIMATE AND WEATHER (10 MARKS)
4.1 Weather is the short-term condition of the atmosphere at a specific place and time. (2)
4.2 Temperature, precipitation (Any two elements) (2)
4.3 Mountains cause orographic rainfall where moist air rises, cools, and condenses on the windward side,

creating rain. (3)

4.4 A thermometer is used; it measures temperature in degrees Celsius or Fahrenheit. (3)

QUESTION 5: PLATE TECTONICS (10 MARKS)

5.1 Plate tectonics is a theory explaining the movement of Earth's lithospheric plates. (3)

5.2 Convergent: Plates move toward each other. Divergent: Plates move away from each other. (4)

5.3 African Plate / Pacific Plate / Eurasian Plate (Any one) (1)

5.4 Lava flows, ash clouds, destruction of settlements, loss of life (Any two) (2)

QUESTION 6: GEOGRAPHICAL TOOLS (10 MARKS)

6.1 Satellite images are pictures of Earth taken from space. (2)

6.2 Used for monitoring weather patterns and tracking environmental changes. (4)

6.3 A compass shows direction on a map. (2)

6.4 A map legend explains the symbols used on a map. (2)

QUESTION 7: RURAL AND URBAN SETTLEMENTS (10 MARKS)

7.1 A rural settlement is a small community in the countryside with low population density. (2)

7.2 High population density, developed infrastructure (Any two) (2)

7.3 Transport enables access to jobs, services, and trade, promoting growth. (3)

7.4 Advantage: Better job opportunities; Disadvantage: Overcrowding or pollution (3)

SECTION E: ESSAY (30 MARKS)

QUESTION 8

Marking guideline (content dependent on learner's answer):

- Introduction: 3 marks
- Human activities such as deforestation, mining, pollution, urbanisation: 6 marks
- Effects on ecosystems, such as habitat loss, climate change: 6 marks
- Solutions: recycling, sustainable farming, environmental laws: 6 marks
- Opinion and conclusion: 3 + 6 marks for coherence, structure, and flow
  ✅ [30 MARKS]

TOTAL: 100 MARKS