

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 Which of the following is a type of weathering?

- A. Erosion
 - B. Mechanical
 - C. Deposition
 - D. Transportation
-

1.2 What is the main cause of desertification?

- A. Deforestation
 - B. Overgrazing
 - C. Urbanization
 - D. Flooding
-

1.3 Which ocean current brings warm water from the equator to the western coast of Africa?

- A. Benguela Current
 - B. Agulhas Current
 - C. Gulf Stream
 - D. Mozambique Current
-

1.4 The Richter scale measures:

- A. Rainfall intensity
 - B. Earthquake magnitude
 - C. Wind speed
 - D. Temperature
-

1.5 Which soil type is best for agriculture?

- A. Sandy soil
 - B. Clay soil
 - C. Loam soil
 - D. Rocky soil
-

1.6 What is the largest river in Africa by volume?

- A. Nile
- B. Congo

- C. Zambezi
D. Limpopo
-

1.7 Which of the following is NOT a renewable resource?

- A. Solar energy
B. Wind energy
C. Coal
D. Hydro power
-

1.8 What does the term “urbanization” mean?

- A. Growth of rural areas
B. Growth of towns and cities
C. Deforestation
D. Desertification
-

1.9 Which climate zone is characterized by very high temperatures and heavy rainfall all year round?

- A. Desert
B. Tropical rainforest
C. Mediterranean
D. Tundra
-

1.10 The main cause of tsunamis is:

- A. Hurricanes
B. Earthquakes under the sea
C. Volcanic eruptions on land
D. Tornadoes
-
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SECTION B: MATCHING ITEMS (5 × 1 = 5 marks)

Match the items in Column A with the correct descriptions in Column B.

Column A	Column B
2.1 Aquifer	A. Movement of sand and soil by wind
2.2 Deforestation	B. Underground layer of water-bearing rock
2.3 Erosion	C. Removal of trees and vegetation
2.4 Desertification	D. Wearing away of earth by wind or water
2.5 Sand dune	E. Hill or ridge of sand formed by wind

- 2.1 _____
 - 2.2 _____
 - 2.3 _____
 - 2.4 _____
 - 2.5 _____
-
-

SECTION C: TRUE OR FALSE ($5 \times 1 = 5$ marks)

Write TRUE or FALSE. If false, correct the statement.

3.1 The equator passes through South Africa.

3.2 The greenhouse effect causes global warming.

3.3 A delta forms at the mouth of a river.

3.4 Mountains have a lower temperature than lowlands because of altitude.

3.5 Tectonic plates move due to the Earth's magnetic field.

SECTION D: SHORT QUESTIONS (40 marks)

4.1 Define the term "climate."

4.2 Explain two causes of soil erosion.

4.3 Describe three effects of deforestation on the environment.

4.4 Name four major types of natural vegetation found in South Africa.

4.5 What is the difference between weather and climate?

SECTION E: ESSAY QUESTIONS (40 marks)

Answer ONE of the following questions.

5.1 Discuss the causes and consequences of desertification. Include how human activities contribute to desertification and suggest ways to reduce its impact.

OR

5.2 Explain the process of the water cycle. Describe the key stages and how it affects weather and climate.

TOTAL: 100 MARKS



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SECTION A: MULTIPLE CHOICE (10 x 1 = 10 marks)

- 1.1 B. Mechanical
 - 1.2 B. Overgrazing
 - 1.3 B. Agulhas Current
 - 1.4 B. Earthquake magnitude
 - 1.5 C. Loam soil
 - 1.6 B. Congo
 - 1.7 C. Coal
 - 1.8 B. Growth of towns and cities
 - 1.9 B. Tropical rainforest
 - 1.10 B. Earthquakes under the sea
-

SECTION B: MATCHING ITEMS (5 x 1 = 5 marks)

- 2.1 B. Underground layer of water-bearing rock
 - 2.2 C. Removal of trees and vegetation
 - 2.3 D. Wearing away of earth by wind or water
 - 2.4 A. Movement of sand and soil by wind
 - 2.5 E. Hill or ridge of sand formed by wind
-

SECTION C: TRUE OR FALSE (5 x 1 = 5 marks)

- 3.1 FALSE — The equator does not pass through South Africa.
 - 3.2 TRUE
 - 3.3 TRUE
 - 3.4 TRUE
 - 3.5 FALSE — Tectonic plates move due to convection currents in the mantle, not the Earth's magnetic field.
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SECTION D: SHORT QUESTIONS (40 marks)

4.1 **Climate:** The average weather conditions of a place over a long period.

4.2 **Causes of soil erosion** (any two):

- Deforestation removing trees that hold soil in place.
- Overgrazing by animals damaging vegetation cover.
- Heavy rainfall washing away topsoil.
- Poor farming methods such as tilling land on slopes.

4.3 Effects of deforestation (any three):

- Loss of biodiversity and habitats for animals.
- Increased soil erosion and degradation.
- Contribution to global warming due to less carbon dioxide absorption.
- Disruption of the water cycle leading to altered rainfall patterns.

4.4 Types of natural vegetation in South Africa:

- Forest
- Grassland
- Savanna
- Desert

4.5 Difference between weather and climate:

- Weather is the day-to-day state of the atmosphere (temperature, rainfall, wind).
- Climate is the average weather conditions measured over a long period (years or decades).

SECTION E: ESSAY QUESTIONS (40 marks)

5.1 Causes and consequences of desertification:

- Causes: Overgrazing, deforestation, drought, poor irrigation, climate change.
- Consequences: Loss of productive land, food insecurity, increased poverty, migration.
- Ways to reduce impact: Afforestation, controlled grazing, sustainable farming, water conservation.

5.2 Water cycle process:

- Evaporation: Water turns into vapor from oceans, lakes, rivers.
- Condensation: Water vapor cools to form clouds.
- Precipitation: Water falls as rain, snow, or hail.
- Collection: Water collects in rivers, lakes, and oceans.
- Importance: Drives weather patterns, supports life, replenishes freshwater sources.

TOTAL: 100 MARKS

MAP

MYST PATHWORKS

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