



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL ASSESSMENT
EXEMPLAR**

2023

GRADE 9

Subject: Social Sciences

Paper: Geography

Marks: 75

Duration: 120 Minutes

excluding 15 minutes reading time

This test consists of 18 pages excluding the cover page.

Instructions to the learner

1. You will receive 15 minutes reading time before you begin answering this test.
2. Read all the instructions and questions carefully.
3. Answer all the questions and Sections.
4. Use the provided answer sheet to write all your answers.
5. Carefully study all the **sources** supplied because they contain guidelines which should help you to answer the questions.
6. Write neatly and legibly.

The test starts on the next page.



Do not start writing until you are told to do so.

SECTION A

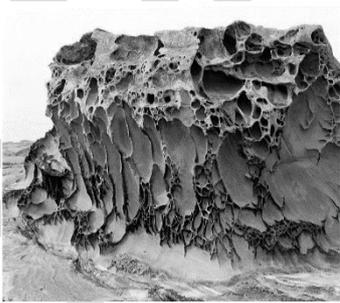
Question1

Choose the correct option from the responses provided. Write down only the correct letter.

1.1 What is weathering?

- A removal of material by action of rivers, waves, wind and moving ice
 - B breaking down of rocks into small particles
 - C laying down of solid material in the form of sediment
 - D steepness of a slope
- (1)

Use Source 1 to answer questions 1.2 to 1.6.

Source 1: Weathering Processes		
<p>Picture A</p>  <p>[Source: National Geographic Society.org]</p>	<p>Picture B</p>  <p>[Source: Science1ON.org]</p>	<p>Picture C</p>  <p>[Source: Soils4teachers.org]</p>

1.2 Which example of physical weathering does Picture A represent?

- A abrasion
 - B frost shattering
 - C expansion
 - D oxidation
- (1)

1.3 In which chemical weathering process do iron minerals in rocks react with dissolved oxygen to produce rusting?

- A hydrolysis
- B carbonation
- C exfoliation
- D oxidation (1)

1.4 Define biological weathering.

- A Minerals react with oxygen.
- B Carbon dioxide dissolves in water to form weak acid.
- C Due to temperature, rock layers peel away little by little.
- D Plants and animals break up the rock. (1)

1.5 Identify the chemical weathering process in Picture B.

- A oxidation
- B carbonation
- C hydrolysis
- D hydration (1)

1.6 Identify the chemical weathering process in Picture C.

- A oxidation
- B carbonation
- C hydrolysis
- D hydration (1)

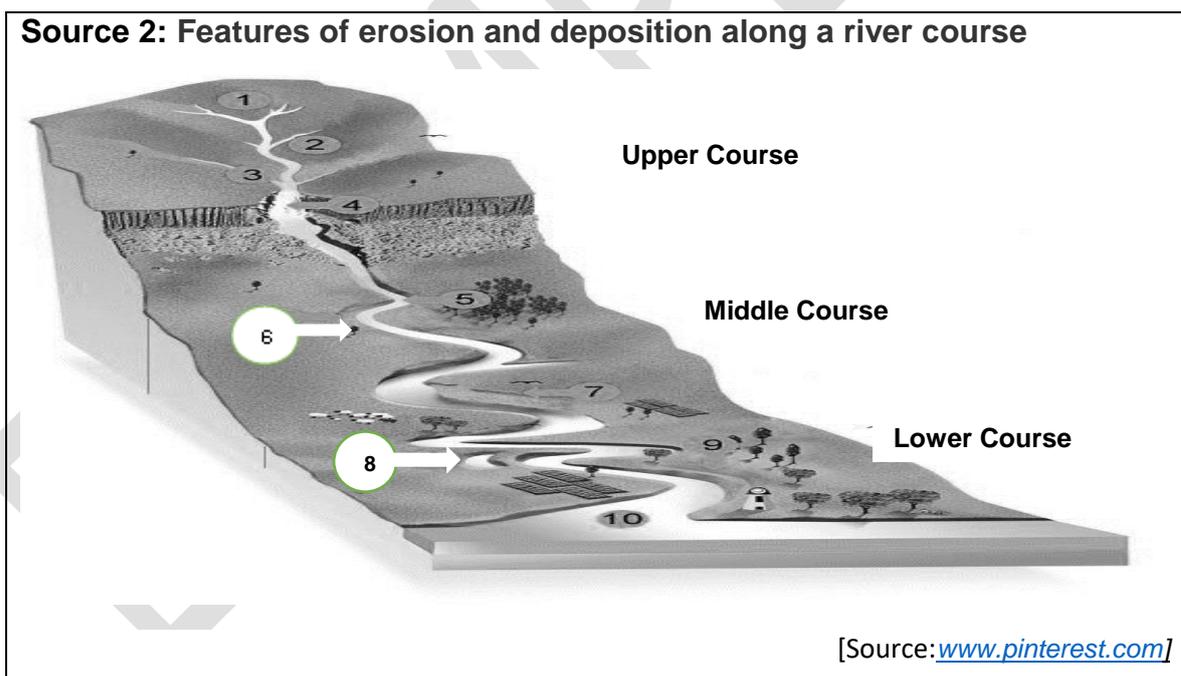
1.7 How do humans cause weathering when constructing roads?

- A by covering land surfaces with vegetation
 - B by allowing indigenous plants to grow
 - C by clearing vegetation
 - D by using windbreaks
- (1)

1.8 In which way do humans increase the rate of chemical weathering?

- A ploughing on steep slopes
 - B road construction
 - C removing vegetation
 - D vehicle emissions
- (1)

Study Source 2 below and answer questions 1.9 to 1.20.



1.9 In which river course are canyons formed?

- A middle course
 - B upper course
 - C lower course
 - D upper and middle course
- (1)

1.10 Identify the feature marked 6.

- A canyon
 - B meander
 - C rapid
 - D delta
- (1)

1.11 Identify the feature marked 8.

- A oxbow lake
 - B gorge
 - C meander neck
 - D tributary
- (1)

1.12 In which course of the river is the oxbow lake found?

- A middle course
 - B upper course
 - C lower course
 - D upper and middle course
- (1)

1.13 What kind of erosion takes place in the upper course of a river?

- A gully erosion
 - B vertical erosion
 - C lateral erosion
 - D splash erosion
- (1)

1.14 Which feature is found in the upper course of a river?

- A rapid
 - B levee
 - C headland
 - D lagoon
- (1)

1.15 What is the main reason for the formation of a waterfall?

- A It rains a lot and therefore the water has a lot of velocity.
- B The water cascades over a layer of hard rock and erodes a layer of softer rock underneath.
- C The river is finding the easiest route to the sea, eroding through the soft rock.
- D Erosion is greatest on the outside of the meander bend. (1)

1.16 Describe how the feature marked 8 is formed.

- A The river load flows faster on the outside of the bend and causes deposition.
- B Erosion broadens the meander neck to form a new channel.
- C Deposition from the river forms a new meander.
- D Erosion narrows the meander neck to form a new channel. (1)

1.17 What is a river load?

- A when many branches of the river are formed by deposition where the river meets the sea
- B a ridge of sand that joins two headlands
- C a total amount of sediment transported by a river
- D the total power of the river as it smashes the river bank (1)

1.18 At which course of the river is deposition most likely to take place?

- A lower course
- B middle course
- C upper course
- D upper and lower course (1)

1.19 What happens when a tributary joins the main stream?

- A The river decreases its speed.
- B The river increases its velocity.
- C The river decreases its volume.
- D The river tributaries increase in number. (1)

1.20 Where is the mouth of a river found?

- A It is found where a river sources its water.
- B It is found where rivers meet.
- C It is found where a river enters the ocean.
- D It is found where a river flows with high speed. (1)

1.21 What do we call anything that can be used to satisfy human needs and has value?

- A patent
- B resource
- C skill
- D potential (1)

1.22 Define a natural resource.

- A resource which comes from the environment
- B resource which people have built
- C skills and services people have and use within a society
- D resources that cannot last (1)

1.23 Which one is an example of a natural resource?

- A water, petroleum, railways and cell phones
- B forests, furniture, petroleum and cell phones
- C petroleum, forests, water and soil
- D furniture, railways, soil and cell phones (1)

1.24 What are renewable resources?

- A skills and services people have
- B resources that can never be used up
- C resources that cannot be replaced
- D resources that have been totally used up (1)

1.25 Which one of the following is an example of a non-renewable resource?

- A water
- B forest
- C coal
- D sun (1)

1.26 Which of the following selections are examples of renewable resources?

- A water, oil and fish
- B trees, water and oil
- C fish, trees and water
- D oil, fish and trees (1)

1.27 What do we call the processing of waste so that it can be used again?

- A rehabilitation
- B extinction
- C depletion
- D recycling (1)

1.28 Which statement best explains resource depletion?

- A when a resource is at a risk of being completely used up
- B when a resource has been dramatically reduced
- C when a resource has been totally used up
- D when a resource has been restored

(1)

1.29 What is meant by the sustainable use of resources?

- A when resources are used such that, they meet the needs of present and future generation
- B when resources are used such that they cannot last
- C when resources cannot be harmed by humans
- D when resources are at a risk of being completely used up by the present generation

(1)

1.30 Which method has recently been promoted by the government of South Africa for efficient usage of electricity?

- A importing more crude oil and natural gas
- B load shedding
- C building more coal-fired power stations
- D use of renewable energy sources

(1)

1.31 Which are the most efficient ways of using water sustainably?

- A Fix leaks, take a shower and close taps.
- B Fix leaks, open water hydrants and irrigate daily.
- C Close taps, irrigate daily and open water hydrants.
- D Take a shower, ignore leaks and irrigate daily.

(1)

Use Source 3 to answer question 1.32.

Source 3: Unsustainable use of resources



[Source: www.fao.org]

1.32 Identify the unsustainable use of a resource shown in Source 3.

- A land degradation
 - B deforestation
 - C afforestation
 - D overgrazing
- (1)

1.33 What role can consumers play when choosing more sustainable resource use?

- A choosing products that can be used once
 - B choosing products that increase the amount of waste produced
 - C using appliances with renewable energy source
 - D travelling only by private vehicles
- (1)

1.34 What do we call the strategy to sustainable fishing, where a maximum quantity of fish is allowed to be taken?

- A size restriction
- B trawling
- C quota
- D angling

(1)

1.35 What is a habitat?

- A a community of living organisms
- B a place where a specific plant or animal normally lives
- C a variety of life in a specific area
- D parts of earth where life exists

(1)

1.36 Name the process of breeding, rearing and harvesting of fish.

- A aquarium
- B aqueous
- C aquifer
- D aquaculture

(1)

1.37 What is meant by carbon footprint?

- A the amount of carbon we create by using fuels that release carbon dioxide
- B usage of less fossil fuels and producing less carbon
- C gases that allow the sun to enter the earth's atmosphere and cause global warming
- D enforcing energy conservation plans

(1)

1.38 Which are major greenhouse gases?

- A hydrogen, water vapour, methane and carbon dioxide
- B methane, nitrous oxide, hydrogen and water vapour
- C ozone, oxygen, hydrogen and methane
- D water vapour, carbon dioxide, methane and ozone (1)

1.39 What do we call the substance that can be broken down into natural substances without harming the environment?

- A biodegradable
- B photosynthesis
- C non-biodegradable
- D synthetic fertiliser (1)

1.40 What is the aim of marine protected areas to sustainable fishing?

- A to set international standards for the mesh sizes of nets
- B to publish a list of endangered fish species
- C to provide a safe place for fish stock to breed and grow
- D to make fishing illegal (1)

1.41 How can businesses reduce their carbon footprint?

- A by frequently buying new office furniture
- B by increasing the amount of electricity they are using
- C by developing action plans on sustainability and not implementing them
- D by printing less and recycling paper (1)

1.42 How best can eco-friendly products be explained?

- A products that do little or no harm to the environment
- B products that are harmful to the environment
- C products made of non-renewable resources
- D products that are ecologically destructive (1)

1.43 Which way can individuals reduce their carbon footprint?

- A by using energy-efficient cars
- B by burning fossil fuels
- C by using electric geysers
- D by using private transport (1)

1.44 What is food security?

- A a health condition where the body lacks the nutrients it needs
- B planting the same crop in a field year in and year out
- C farming that involves taking the produce to the market
- D when all the citizens of the country have access to nutritious food all the time (1)

1.45 Identify **THREE** elements of food security.

- A drought, floods and famine
- B land, farming and government
- C availability, access and use
- D access, floods and land (1)

- 1.46 What type of farming raises a large number of animals in small spaces for meat production?
- A stock farming
 - B monoculture
 - C factory farming
 - D crop farming
- (1)

- 1.47 What is the argument against factory farming?
- A Animals can easily catch diseases.
 - B There is the possibility of producing large amounts of food.
 - C Strict laws regulate farming conditions.
 - D More people can afford meat than before.
- (1)

- 1.48 What does GM stand for?
- A General Modification
 - B Genetic Moderation
 - C Global Modification
 - D Genetic Modification
- (1)

- 1.49 What is the disadvantage of GM crops?
- A may be harmful to humans
 - B less famine and starvation
 - C less pesticides sprayed into the environment
 - D higher food yields produced
- (1)

1.50 How can using appropriate farming techniques be of benefit?

- A high-tech farming replacing workers
- B increases food production
- C increases the size of carbon footprint
- D natural plants are affected by largescale farming (1)

1.51 Which farming techniques could help prevent soil erosion?

- A monoculture, applying herbicides and terraces
- B strip cropping, monoculture and planting trees
- C drainage ditches, strip cropping and terraces
- D applying herbicides, drainage ditches and monoculture (1)

1.52 Which of the following best explains the requirements of sustainable farming techniques?

- A monoculture, careful use of water and synthetic fertilisers
- B monoculture, synthetic fertilisers and furrow irrigation
- C crop rotation, furrow irrigation and use of pest-resistant crops
- D crop rotation, careful use of water and use of pest-resistant crops (1)

[52]

SECTION B

Question 2

Source 4 is a case study on agriculture as a contributor to soil erosion.

Case study: Agriculture as a contributor to soil erosion

Overgrazing causes soil erosion.



Contour planting reduces soil erosion.



[Source: E-classroom.co.za]

South African farmers produce many kinds of crops and rear animals such as cattle, sheep and goats. Unfortunately, bad farming practices have led to high rates of soil erosion in certain places.

How rearing animals can lead to soil erosion

One of the biggest contributors to soil erosion is overgrazing. This means keeping more animals on the land than there is grass to feed them. The grass is eaten more quickly than it can re-grow, and so the vegetation cover on the land is lost and erosion is increased. The soil is also compacted, especially along tracks that animals make by walking along the same path repeatedly. Over time deep gullies called 'dongas' are eroded in tracks and large amount of soil is lost.

How cultivation can lead to soil erosion

Practices that increase erosion on farms include:

- Mono-cropping, which refers to growing the same crop year after year. This reduces soil fertility, causing the soil to be more easily eroded.
- Using pesticides and chemical fertilizers. These kill soil organisms that are important for good soil structure.
- Planting crops in rows, up and down hillsides. This enables water to flow downhill fast, and so erode channels between the rows. It is better to use contour planting, in which crops are planted in rows along the contour lines, as this reduces the speed of water flowing downhill.

[Source: E-classroom.co.za]

- 2.1 How do humans contribute to erosion through construction? (1)
- 2.2 Mention **ONE** way people contribute to erosion through mining. (1)
- 2.3 Identify **ONE** poor farming method that leads to soil erosion in the case study. (1)
- 2.4 Define the following terms:
- a. soil erosion (2)
 - b. overgrazing (2)
- 2.5 What is the difference between subsistence farmers and commercial farmers? (4)
- 2.6 Based on the case study, what is the impact of soil erosion on agriculture? Name **TWO** effects. (2)
- 2.7 Suggest **TWO** solutions to soil erosion on agricultural land. (2)

EXEMPLAR

Question 3

Read through Source 5, on overfishing and answer the question that follows.

Source 5

‘Overfishing is the removal of organisms from the marine environment by humans at a rate which cannot be sustained by the local ecosystem and therefore significantly alters the natural ecosystem. When fishing a population faster than it can replace itself; the population decreases in size as a result.’

[Source: E-classroom.co.za]

3.1 With reference to the statement above, write a paragraph of 8 – 10 lines and discuss the effects of over-fishing.

Paragraphs should be structured as follows:

- Topic sentence
- The main points
- The concluding sentence

(8)

Paragraph writing guide

Indicators	Marks
Controlling/introductory sentence, Six facts and concluding sentence	8
Controlling/introductory sentence, Five facts and concluding sentence	7
Controlling/introductory sentence, Four facts and concluding sentence	6
Controlling/introductory sentence, Three facts and concluding sentence	5
Controlling/introductory sentence, Two facts and concluding sentence	4
Controlling/introductory sentence, One fact and concluding sentence	3
One fact and controlling/introductory sentence or concluding sentence	2
One fact	1
Question not answered at all/incorrect or irrelevant responses	0

[23]

End of test

EXEMPLAR