KWA-NGOZA SECONDARY SCHOOL

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KWAZULU-NATAL PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

KWANGOZA SECONDARY SCHOOL
UBHAQA (ILEMBE)
CIBANE TRIBAL AUTHORITY (16)

GRADE 9

SOCIAL SCIENCES - GEOGRAPHY

FINAL EXAMINATION

OCTOBER/NOVEMBER 2024

MODERATOR: **MRS N.F DLAMINI**

EXAMINER: MR T KHUZWAYO

APPROVED BY: **MRS N.F DLAMINI**

SIGNATURE: ……

DATE: ……

SCHOOL STAMP

MARKS: 75

TIME: 1 ½ hours

N.B. This question paper consists of 9 pages.

INSTRUCTIONS AND INFORMATION

1 This question paper consists of TWO sections.

SECTION A

QUESTION 1:	WEATHERING	(10)
QUESTION 2:	EROSION AND DEPOSITION	(15)
QUESTION 3:	THE IMPACT OF PEOPLE ON SOIL EROSION	(10)

SECTION B

QUESTION 4:	RESOURCE USE & SUSTAINABLE USE OF RESOURCES	(30)
QUESTION 5:	FOOD RESOURCES	(10)

2 Answer ALL FIVE questions.

3 ALL diagrams are included in the QUESTION PAPER.

4 Leave a line between the subsections of questions answered.

5 Start EACH question at the top of a NEW page.

6 Number the answers correctly according to the numbering system used in this question paper.

7 Do NOT write in the margins of the ANSWER SHEET.

8 Draw fully labelled diagrams when instructed to do so.

9 Answer in FULL SENTENCES, except when you have to state, name, identify or list.

10 Units of measurement MUST be indicated in your final answer, e.g. 1020 hPa, 14 °C and 45 m.

11 You may use a non-programmable calculator.

12 You may use a magnifying glass.

13 Write neatly and legibly.

KWANGOZA

SECTION A: SURFACE FORCES THAT SHAPE THE EARTH

QUESTION 1: WEATHERING

1.1. Choose a term/concept from COLUMN B that matches the statement in COLUMN A. Write only the letter (Y or Z) next to the question numbers (1.1.1 to 1.1.5) in the ANSWER SHEET, e.g. 1.1.6 Y.

COLUMN A		COLUMN B	
1.1.1.	Weathering	**Y** **Z**	Breaking down of rocks, soil and minerals Higher lying area
1.1.2.	Physical weathering	**Y** **Z**	Breaking down of rocks into smaller components without changing the chemical composition The physical growth of urban areas.
1.1.3.	Chemical weathering	**Y** **Z**	The breakdown of rocks into smaller particles with a different mineral composition from the original rock A change in the weather patterns that causes global warming
1.1.4.	Biological weathering	**Y** **Z**	Greenhouse gases like carbon dioxide. The breakdown of rocks by living things as roots and animals
1.1.5.	Exfoliation	**Y** **Z**	Occurs when rocks break up into large fragments Rocks weather by peeling off in sheets
			(5 x 1) (5)

1.2. Various options are provided as possible answers to the following questions. Choose the answer and write only the letter (A–D) next to the question numbers (1.2.1 to 1.2.5) in the ANSWER SHEET, e.g. 1.2.6 D.

1.2.1. These are two examples of human activities that can increase the rate of weathering.

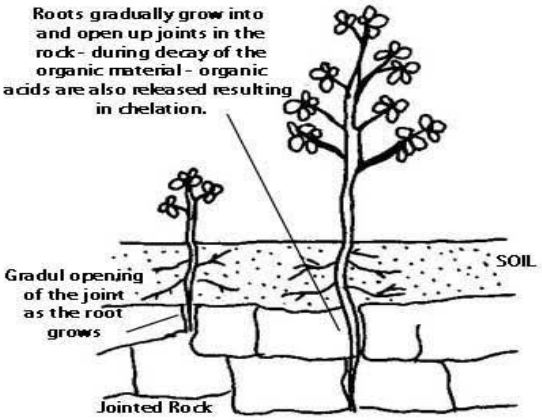
(i) The burning of fossil fuels
(ii) When constructing roads, people use dynamite to break up rocks
(iii) Raining
(iv) Forest

A. (i) and (ii)
B. (ii) and (iii)
C. (iii) and (ii)
D. (iv), (ii), and (iii)

1.2.2. Chemical weathering can occur through solution, oxidation, carbonation, hydration and....

A. Biota
B. Hydrolysis
C. Exfoliation
D. burrows

1.2.3. The sketch below shows a plant root breaking a rock. This type of weathering is called.....



[Adapted from https://www.google.com/search?q=weathering]

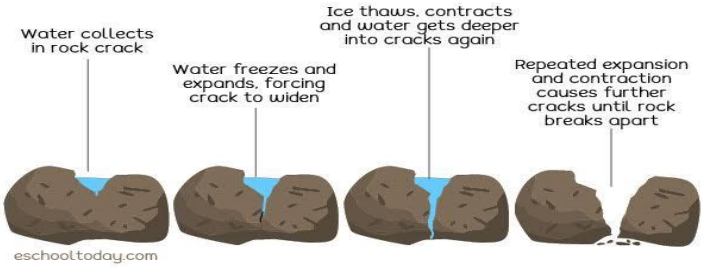
A. Biological weathering
B. Physical weathering
C. Chemical weathering
D. Soil erosion

1.2.4. Three main types of physical weathering are:

(i) Granular (small grain) disintegration
(ii) Exfoliation
(iii) Block separation
(iv) Solution

A. (i) and (ii)
B. (i), (ii), and (iii)
C. (iii) and (ii)
D. (iv), (ii), and (iii)

1.2.5. This type of weathering is called



[Source: eschooltoday.com]

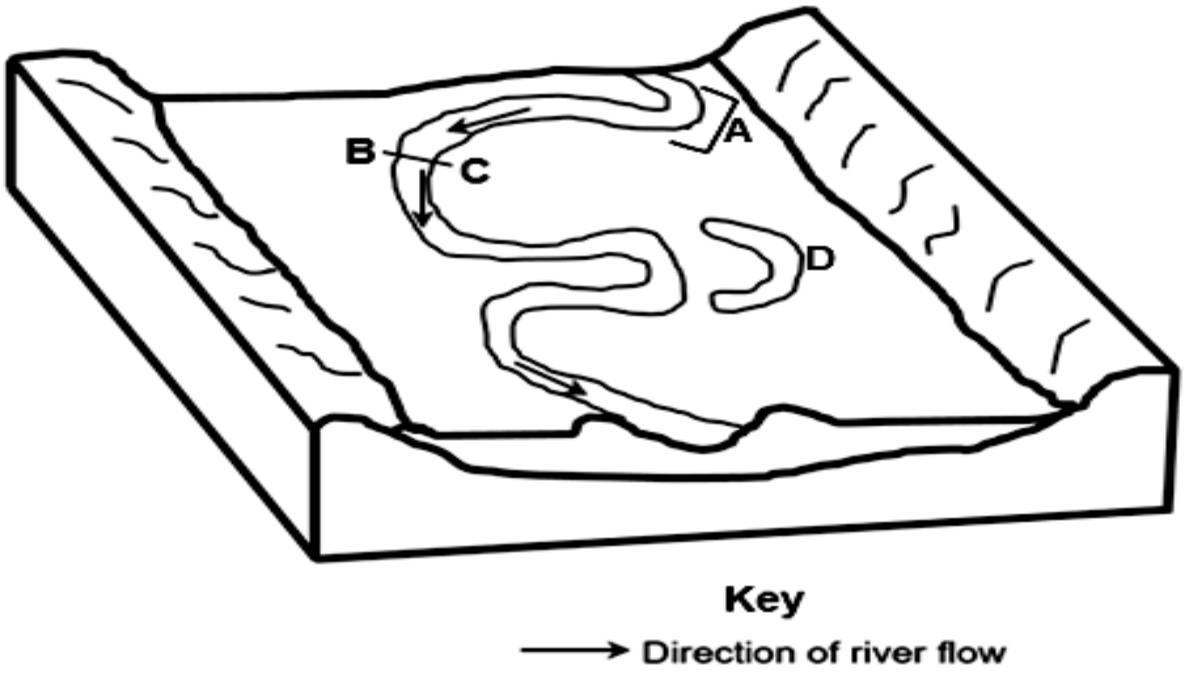
A. Chemical weathering
B. Physical weathering
C. Human activities on weathering
D. Biological weathering

(5 x 1) (5)

[10]

QUESTION 2: EROSION AND DEPOSITION

2.1. Refer to the sketch on rivers (features of erosion and deposition along a river course) below.



[Source: Examiner's own sketch]

2.1.1. The fluvial landforms, shown in the sketch, are mainly found in the (**Mature stream; middle** / **Old age stream; lower**) course. (1 x 1) (1)

2.1.2. Identify fluvial landform **A** on the sketch. (1 x 2) (2)

2.1.3. (a) Draw a rough cross-section from **B** to **C** and label it. (3 x 1) (3)

(b) Will erosion take place at **B** or **C**? (1 x 1) (1)

(c) Give a reason for your answer to QUESTION 2.1.3 **(b).** (1 x 2) (2)

2.1.4. In a paragraph of approximately **SIX** lines, describe the processes that resulted in the change of fluvial landform **A** to an ox-bow lake at **D**. (6)

[15]

QUESTION 3: THE IMPACT OF PEOPLE ON SOIL EROSION

3.1. Refer to the extract below on soil erosion in the Amazon Rainforest.

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The Amazon is the world's largest rainforest and the largest river basin on the planet.

Today, the Amazon is facing a multitude of threats as a result of unsustainable economic development: 20% of the Amazon biome has already been lost, and the trend will worsen if left unchecked, with erosion being the major concern.

The logging and clear-cutting of rain forests are some of the leading causes of land degradation worldwide. In the Amazon Rainforest of Brazil for example, an area the size of a football field is cut every second, leaving vast swaths of land vulnerable to wind, rains and floods that cause erosion.

The Amazon is the biggest deforestation front in the world and interventions are urgently needed to prevent a large-scale, irreversible ecological disaster due to man.

Deforestation by activities such as unsustainable logging, ranching and mining can lead to fast and widespread erosion of rain forest soils. Logging companies clear-cut large areas of rain forest, and ranchers with little land allow cattle to overgraze delicate rain forest grasses. Agriculture is another major cause of deforestation and erosion.

[Source: http://wwf.panda.org/our_work/forests/deforestation_fronts/deforestation_in_the_ amazon/. Accessed on 28 August 2018.]

3.1.1. What is *deforestation*? (1 x 2) (2)

3.1.2. According to the extract, name TWO human activities that has led to soil erosion. (2 x 1) (2)

3.1.3. List TWO physical factors that have caused soil erosion. (2 x 1) (2)

3.1.4. State ONE way in which soil erosion will impact on the environment of the Amazon rain forest. (1 x 2) (2)

3.1.5. Explain the effects of soil erosion on the environment in the Amazon rain forest. (1 x 2) (2)

[10]

TOTAL SECTION A: 35

SECTION B: RESOURCE USE AND SUSTAINABILITY

QUESTION 4: RESOURCE USE

4.1. Choose a term/concept from COLUMN B that matches the statement in COLUMN A. Write only the letter (Y or Z) next to the question numbers (1.1.1 to 1.1.5) in the ANSWER SHEET, e.g. 1.1.6 Y.

COLUMN A		COLUMN B	
4.1.1.	Things we require in order to survive, like food.	**Y** **Z**	Needs Wants
4.1.2.	A community of interacting organisms and their physical environment.	**Y** **Z**	Eco-system Erosion
4.1.3.	Catching large, unlimited amounts of fish which leads to reduced amounts of fish over time.	**Y** **Z**	Food security Over-fishing
4.1.4.	Resources with the ability to reproduce through biological or natural processes and which will not run out.	**Y** **Z**	Renewable resources Non-renewable resources
4.1.5.	Abusing the soil by allowing animals to graze on the same area.	**Y** **Z**	Over-grazing Depleted
			(5 x 1) (5)

4.2. **SUSTAINABLE USE OF RESOURCES**

Give one term for each of the following descriptions. Write only the term next to the question numbers (4.2.1 to 4.2.5)

4.2.1. A change in the weather patterns that causes global warming

4.2.2. The gradual increase in the overall temperature of the earth's atmosphere

4.2.3. Gases that trap heat and causes the temperature of the atmosphere to rise

4.2.4. Greenhouse gases like carbon dioxide, which trap heat in the atmosphere

4.2.5. Using resources carefully so that future generations will benefit from them

(5 x 1) (5)

4.3. Refer to the extract below on coal as a conventional energy source.

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Electricity load shedding will halve GDP growth this year and cost the country 275 000 in potential jobs, say analysts.

In June, president Cyril Ramaphosa announced that the requirements for the private sector to obtain a licence for own power generation had been relaxed, with the official change to be made in a government gazette within the next two months.

Ramaphosa has raised the threshold to 100 MW. According to Ramaphosa, firms will also be allowed to sell any excess power generated back into the grid. However, it could take more than a year to see the effects of the change, says economists at the Bureau for Economic Research (BER).

"In terms of the impact on the economy, it is important to realise that own generation (renewable) projects can take up to 18 months to complete. This does imply that periodic load shedding is likely to remain a feature of the South African landscape in the foreseeable future."

The South African Photocatalytic Association estimates that the lifting of the licensing cap could add up to 5 500 MW of additional power over the next two years.

"The key message here is that in line with our thinking since the end of 2019, there is scope to be more optimistic about the prospects for the South African economy beyond 2022," the BER said.

[Adapted from DubeTradePort.slideshare.net]

4.3.1. Define the concept load shedding. (1 x 2) (2)

4.3.2. Name the power utility that provides South Africa with electricity. (1 x 1) (1)

4.3.3. According to the extract, what are the effects of load shedding on the economy of South Africa? (2 x 1) (2)

4.3.4. State the causes of load shedding in South Africa. (3 x 1) (3)

4.3.5. Explain how president Cyril Ramaphosa's decision positively impacted on the amount of electricity available to South Africa. (1 x 2) (2)

4.3.6. Define the concept unsustainable resource use. (1 x 2) (2)

4.3.7. Why does South Africa favour a non-conventional source of energy, such as coal, to be its main source of energy? (2 x 2) (4)

4.3.8. Explain the negative impact that coal mining has on the environment. (2 x 2) (4)

[30]

QUESTION 5: FOOD RESOURCES

5.1. Refer to the extract below on food security.

FOOD SECURITY IN SOUTH AFRICA 2020-2021

According to a report released by Statistics South Africa, Measuring Food Security in South Africa: Applying the Food Insecurity Experience Scale, almost 23,6% (percentage) per cent of South Africans were affected by moderate to severe food insecurity in 2021. Statistics South Africa (Stats SA) has been working on improving its measurement of food security and recently introduced the Food Insecurity Experience Scale. Since food insecurity is a global phenomenon, it is important to measure it using tools that guarantee comparability across countries.

Health pandemics, such as Covid-19, has denied many South Africans their right to adequate food as indicated in the South African Constitution. This has undermined the efforts that have been made to meet the National Development Plan's goal of 'Zero Hunger' by 2030.

[Source: Examiner's own sketch]

5.1.1. Define the concept food security. (1 x 2) (2)

5.1.2. What percentage of South Africans experienced food insecurity in 2021? (1 x 2) (2)

5.1.3. What is the importance of the Food Insecurity Experience Scale according to the extract? (1 x 2) (2)

5.1.4. Suggest how health pandemics (disease), such as Covid-19, lead to food insecurity in South Africa. (2 x 2) (4)

5.1.5. Explain how the South African government can help farmers (planters) in achieving 'Zero Hunger' by 2030. (1 x 2) (2)

[10]

TOTAL SECTION B: 40
GRAND TOTAL: 75