BERGVLIET HIGH SCHOOL
**GEOGRAPHY**
**GRADE 9**

**FINAL EXAMINATION**
MONDAY 11 NOVEMBER 2024

| MARKS: 75 | TIME: 1½ HOURS |
|---|---|

EXAMINER: MR B. JOHNS

MODERATORS: MR S. PATTENDEN
MRS V. SINGARUM

**INSTRUCTIONS AND INFORMATION**

1. Answer ALL the questions on this question paper.
2. Write your NAME, SURNAME and GRADE 9 CLASS on this cover.
3. Answer in FULL sentences except when asked to name, identify, or list.
4. Use the MARK ALLOCATION as a guide to how much to write.
5. Write neatly and legibly in BLUE or BLACK ink only.
6. Drawings and sketches can be done in PENCIL and labels in PEN.
7. The question paper consists of TWELVE pages including this cover page.

SURFACES FORCES THAT SHAPE EARTH



RESOURCE USE AND SUSTAINABILITY



**NAME:** …..…… **GRADE 9**: ……

**QUESTION 1 SURFACE FORCES THAT SHAPE THE EARTH**

1.1 Match each term (in 1.1.1 to 1.1.5) with the letter of the correct image.
Write only the letter (**A** to **F**) in space provided next to each term.



**A:** Rust



**B:** Limestone Cave



**C:** Tree Roots



**D:** Rock in Snow



**E:** Weathered Rock



**F:** Feature of Wind Erosion

1.1.1 Freeze Thaw Action ……..

1.1.2 Oxidation ……..

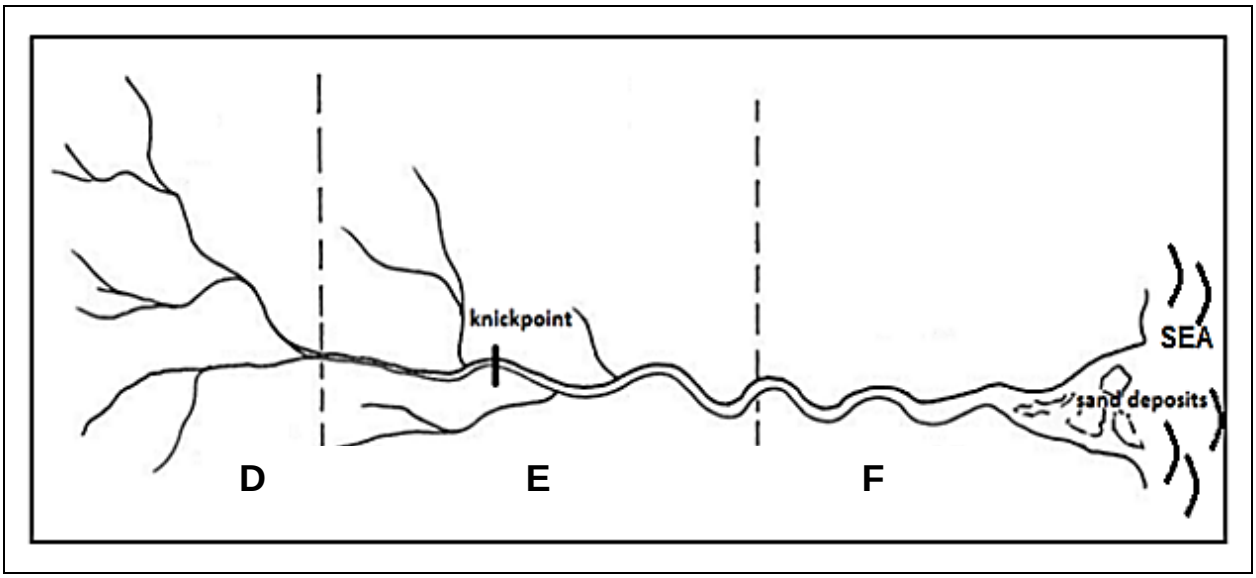
1.1.3 Carbonation ……..

1.1.4 Biological ……..

1.1.5 Exfoliation ……..

(5 x 1) (5)

1.2 Study the diagram of a river system.




1.2.1 In which course (**D**, **E** or **F**) of the river system is the source found?

……..

(1 x 1) (1)

1.2.2 Describe the dimensions of the river channel in the course of the river identified in QUESTION 1.2.1.

……..

……..

(2 x 1) (2)

1.2.3 A knickpoint marks a sudden change (drop) in the gradient of a river. Which fluvial landform is likely to develop at the knickpoint?

……..

(1 x 1) (1)

1.2.4 Name the course of the river marked **F**.

……..

(1 x 1) (1)

1.2.5 Discuss why the sand deposits are formed as the river enters the sea.

……..

……..

(1 x 2) (2)

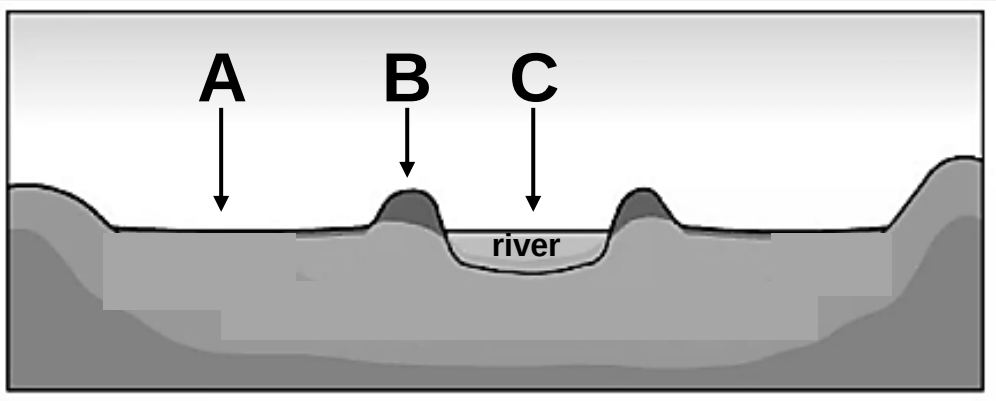
1.2.6 Give the name the fluvial landform created by the sand deposits at the place where the river enters the sea.

……..

(1 x 1) (1)

1.3 Refer to the diagram of a levee and a description of its formation.

**DIAGRAM OF LEVEE**




**DESCRIPTION OF LEVEE FORMATION**

Floodplains and levees are formed by (1.3.2). When a river (1.3.3), the river water overflows the banks of the river and immediately slows down due to friction. The river's (1.3.4) is composed of different sized particles. The (1.3.5) are dropped first, building up a raised riverbank called a levee. The silt is carried further away from the river to form the fertile floodplain.

1.3.1 Match the terms *levee* and *floodplain* with either **A**, **B** or **C**.

Levee: …… Floodplain: ……

(2 x 1) (2)

1.3.2 Identify the fluvial process.

……..

(1 x 1) (1)

1.3.3 Name the natural disaster.

……..

(1 x 1) (1)

1.3.4 The term for all the material carried (transported) by a river.

……..

(1 x 1) (1)

1.3.5 Choose the correct word: largest **or** smallest.

……..

(1 x 1) (1)

1.3.6 Discuss the value of the floodplain for human activity.

……..

……..

……..

(1 x 2) (2)

1.4 Read the extract, and then answer the questions that follow.

**SOIL DEGRADATION IN SOUTH AFRICA**

Environmental conditions in the former homelands of South Africa, such as in Transkei and Ciskei, can contribute positively to the development of agriculture. However, a number of factors have caused the land to become eroded and the soil to become infertile. Environmental, climatic, historical, political and socio-economic factors have interacted with each other to effect land degradation. Steep slopes, low rainfall and high temperatures contribute to the poor carrying-capacity of the land. Land degradation is highest where poverty is most extreme, than where there is virtually no poverty.

1.4.1 List ONE climatic and ONE socio-economic cause of soil erosion and land degradation from the extract.

Climatic: ……..

Socio-economic: ……..

(2 x 1) (2)

1.4.2 Describe ONE way in which steep slopes contribute to soil infertility.

……..

……..

(1 x 2) (2)

1.4.3 Suggest ONE reason why land degradation is highest in impoverished areas.

……..

……..

(1 x 2) (2)

1.4.4 In a paragraph of approximately EIGHT lines discuss how agriculture contributes to increased weathering and erosion.

……..

……..

……..

……..

……..

……..

……..

……..

(4 x 2) (8)

**[35]**

## QUESTION 2 RESOURCE USE AND SUSTAINABILITY

2.1 Various options are provided as possible answers to the following questions. Choose the answer and write only the letter (A–D) in the block next to each question.

2.1.1 Those things that we need and use daily are called …

A appliances.
B resources.
C utilities.
D sources.

2.1.2 … resources are extracted from the physical environment.

A Human
B Mineral
C Natural
D Synthetic

2.1.3 Which of the following energy sources does not produce carbon?

A Biomass
B Coal
C Oil
D Natural gas

2.1.4 Resources with a limited supply that can run out if used unwisely.

A Renewable
B Non-renewable
C Sustainable
D Unusable

2.1.5 In South Africa, electricity is mainly generated using … as an energy source.

A biomass
B coal
C oil
D natural gas

(5 x 1) (5)

2.2 Study the illustration of an energy-efficient home.




2.2.1 Explain why it is important for a home to be energy efficient.

……..

……..

……..

……..

……..

(2 x 2) (4)

2.2.2 Quote a phrase from the illustration that indicates a water saving measure.

……..

(1 x 1) (1)

2.2.3 Suggest ONE benefit of planting indigenous trees instead of alien species.

……..

……..

(1 x 2) (2)

2.2.4 Identify the alternative (renewable) energy source used by the homeowners.

……..

(1 x 1) (1)

2.2.5 With reference to QUESTION 2.2.4, suggest ONE reason why more South Africans are not using the alternative energy source.

……..

……..

(1 x 2) (2)

2.2.6 Describe how each of the following measures make a positive contribution to sustainable resource use.

Using energy efficient lightbulbs.

……..

(1 x 1) (1)

Sealing ductwork and air leaks, and installing double glazing windows.

……..

……..

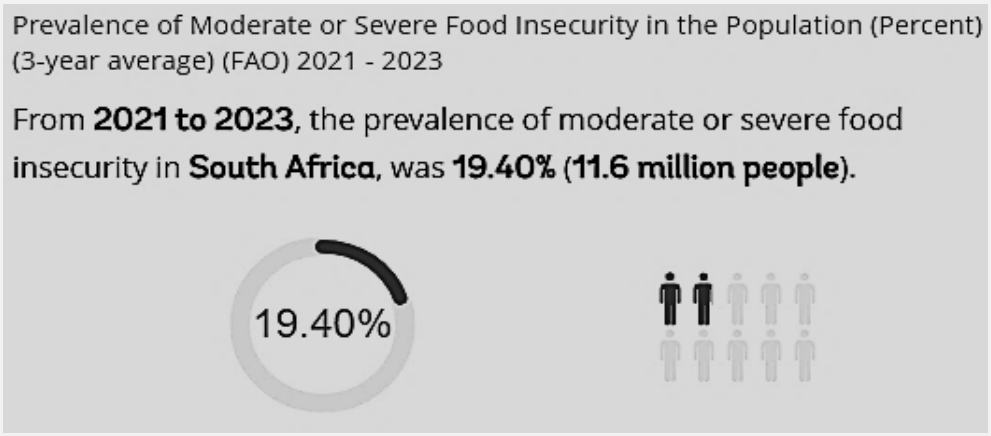
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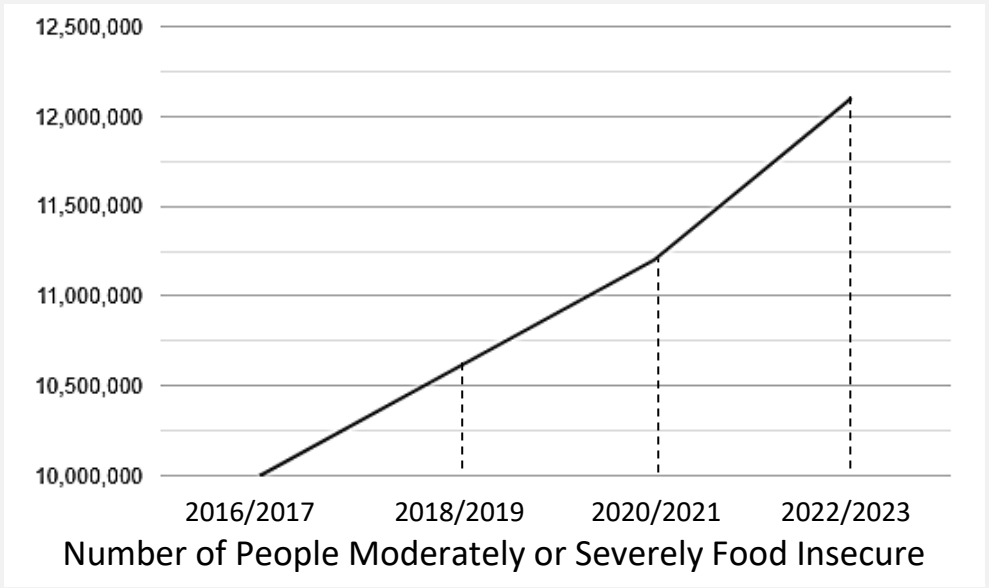
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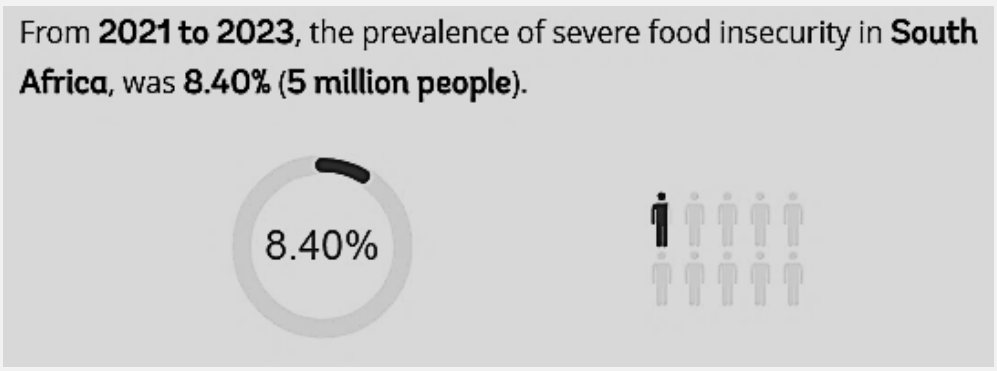
……..

(2 x 2) (4)

2.3 Refer to the statistics on food security and food insecurity in South Africa.




2.3.1 Choose the correct word from inside the brackets to complete the definition:

Food (insecurity / security) is defined as all people, at all times, having physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.

……..

(1 x 1) (1)

2.3.2 List the THREE elements of food security.

……..

……..

(3 x 1) (3)

2.3.3 What percentage of South Africans experienced moderate or severe food insecurity between 2021 and 2023?

……..

(1 x 1) (1)

2.3.4 South Africa had an average unemployment rate of 28% between 2021 and 2023.

Does unemployment increase **or** decrease food security?

……..

(1 x 1) (1)

Explain the reason why unemployment impacts on food security.

……..

……..

……..

(1 x 2) (2)

Refer to the graph showing the number of people who are moderately or severely food insecure, and consider the statistics below showing population growth in South Africa.

| 2023 | 2022 | 2021 |
|---|---|---|
| 60.4 million | 59.9 million | 59.4 million |

2.3.5 In which year did the number of food insecure people in South Africa first exceed 10.5 million?

……..

(1 x 1) (1)

2.3.6 Did South Africa's population decrease or increase between 2021 and 2023?

……..

(1 x 1) (1)

2.3.7 Describe the impact of population growth on food security in South Africa.

……..

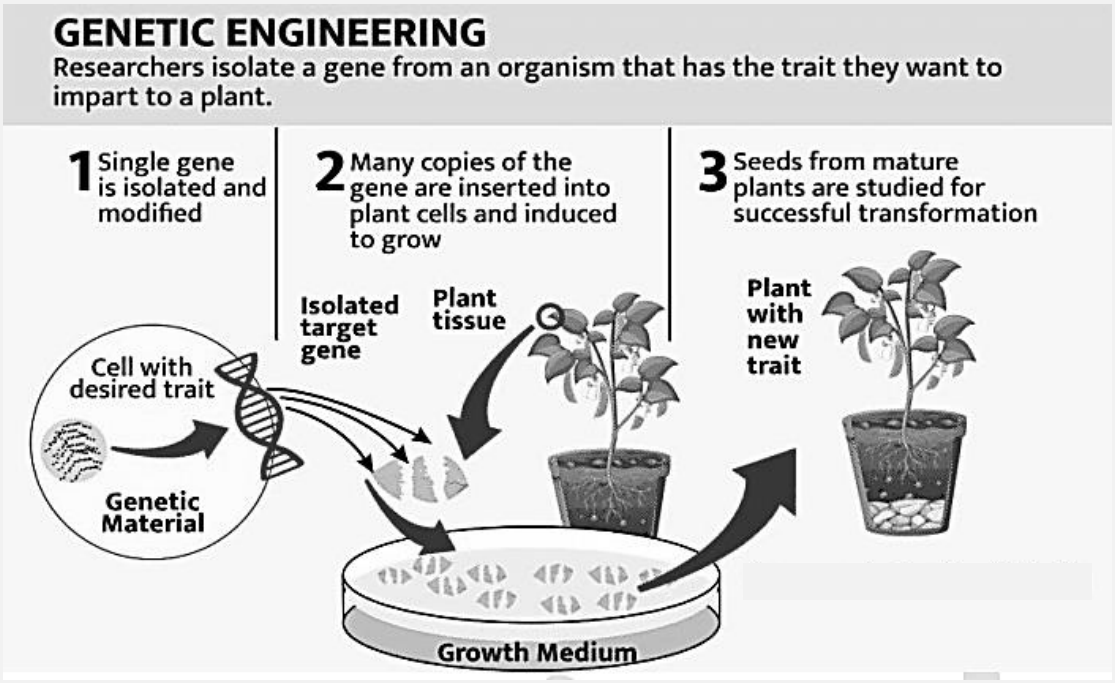
……..

……..

……..

(1 x 2) (2)

2.4 Study the infographic on GM.




South Africa ranks among the top ten countries globally for adoption of GM crops. About 2.74 million hectares are dedicated to GM crop production each year. GM cotton, soybean and maize are commercialised in South Africa. South Africa's cotton area is 100% GM, soybean production is 95% GM, and maize production is greater than 85% GM. These crops either have insect resistance or tolerance to herbicides.



South African Staple: Mealie Pap

2.4.1 What do the letters *GM* stand for?

……..

(1x 1) (1)

2.4.2 Which agricultural product (crop) is used to produce mealie pap?

……..

(1 x 1) (1)

2.4.3 Discuss how drought in South Africa can potentially decrease the ability of South Africans to enjoy mealie pap with their meals.

……..

……..

……..

(1 x 2) (2)

2.4.4 Explain the positive contribution that GM makes to food security in South Africa.

……..

……..

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……..

……..

……..

……..

……..

……..

……..

(2 x 2) (4)
**[40]**

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TOTAL: 75