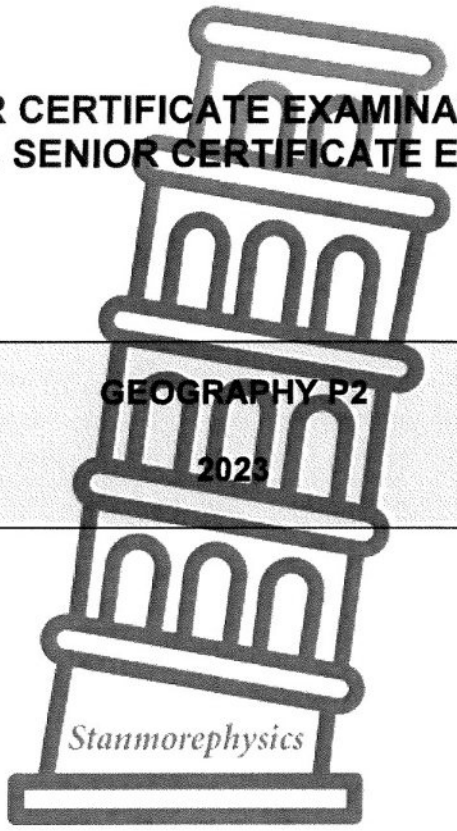
basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

SENIOR CERTIFICATE EXAMINATIONS/ NATIONAL SENIOR CERTIFICATE EXAMINATIONS



GEOGRAPHY P2

2023

MARKS: 150

TIME: 3 hours

This question paper consists of 19 pages.

Copyright reserved

INSTRUCTIONS AND INFORMATION

1. This question paper consists of TWO sections.

   SECTION A
   QUESTION 1: RURAL AND URBAN SETTLEMENTS (60)
   QUESTION 2: ECONOMIC GEOGRAPHY OF SOUTH AFRICA (60)

   SECTION B
   QUESTION 3: GEOGRAPHICAL SKILLS AND TECHNIQUES (30)

2. Answer ALL THREE 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 BOOK.
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. 1 020 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.

SPECIFIC INSTRUCTIONS AND INFORMATION FOR SECTION B

14 A 1 : 50 000 topographic map 2726DC ODENDAALSRUS and the 1 : 10 000 orthophoto map 2726 DC 14 ODENDAALSRUS are provided.

15. The area demarcated in RED/BLACK on the topographic map represents the area covered by the orthophoto map.
16. Marks will be allocated for steps in calculations.
17. You must hand in the topographic map and the orthophoto map to the invigilator at the end of this examination session.

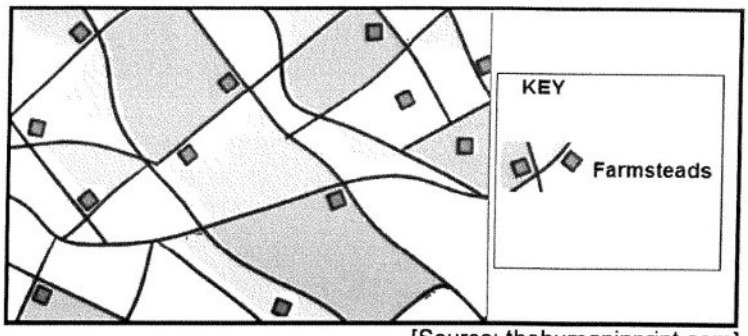
Copyright reserved

SECTION A: RURAL AND URBAN SETTLEMENTS AND THE ECONOMIC GEOGRAPHY OF SOUTH AFRICA

QUESTION 1: RURAL AND URBAN SETTLEMENTS

1.1 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 (1.1.1 to 1.1.8) in the ANSWER BOOK, e.g. 1.1.9 D.

1.1.1 The rural settlement pattern shown below is …



[Source: thehumaninprint.com]

A circular.
B nucleated.
C dispersed.
D linear.

1.1.2 Nucleated rural settlements are associated with …

A extensive farming.
B fragmented land.
C monoculture.
D the use of bulky machinery.

1.1.3 The situation of a settlement is …

A the site on which the settlement is located.
B the exact land on which the settlement is located.
C its location in relation to human and physical features.
D the amount of money the settlement generates.

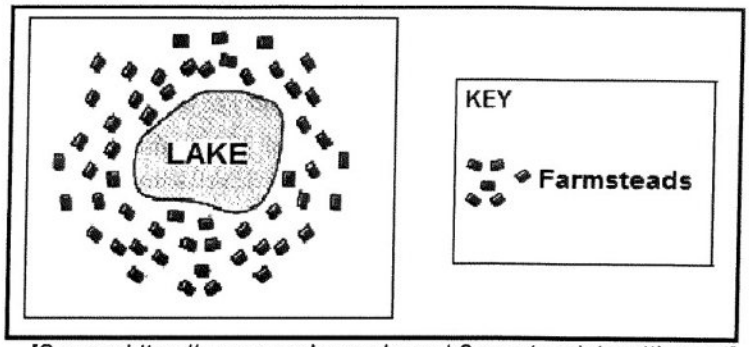
1.1.4 An economic factor that influences the situation of a rural settlement is …

A fertile soil.
B microclimate.
C gentle land.
D local markets.

1.1.5 … is/are a social factor that influences rural settlement patterns.

A Safety
B Rainfall
C Markets
D Topography

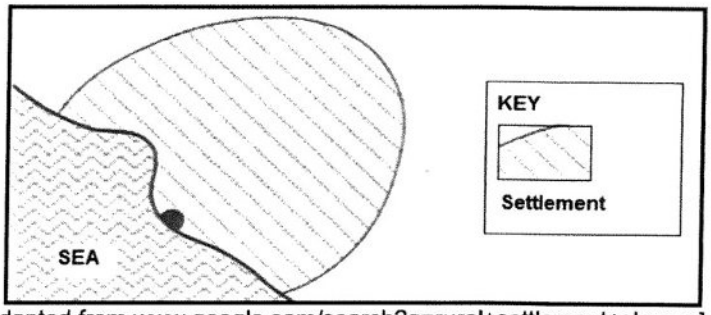
1.1.6 The settlement below can be described as a …



[Source: https://www.google.com/search?q=wet+point+settlement]

A wet-point settlement that is nucleated.
B dry-point settlement that is nucleated.
C wet-point settlement that is dispersed.
D dry-point settlement that is dispersed.

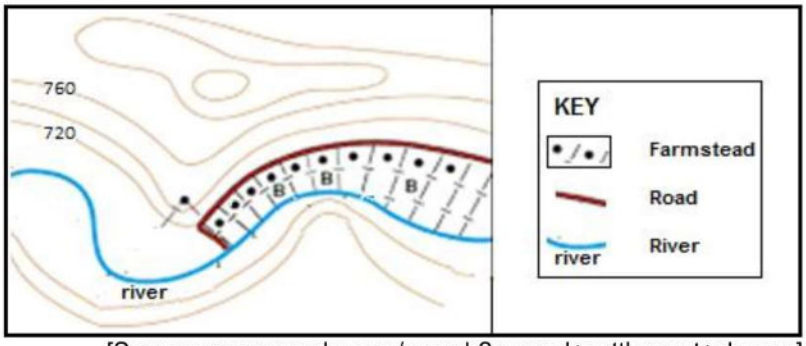
1.1.7 The … shape of the settlement below was influenced by the sea.



[Adapted from www.google.com/search?q=rural+settlement+shapes]

A circular
B star
C semi-circular
D linear

1.1.8 Physical factors that influence the shape of the settlement below:

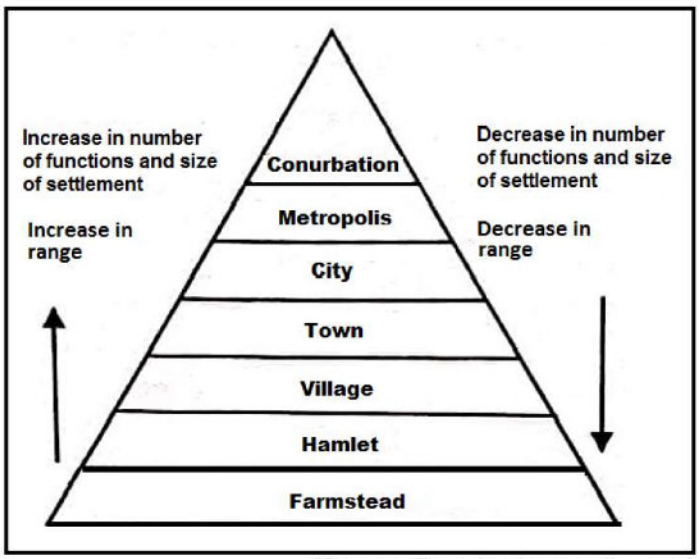


[Source: www.google.com/search?q=rural+settlement+shapes]

(i) Narrow valley
(ii) Perennial river
(iii) Soil fertility
(iv) Gentle land

A (i) and (ii)
B (i) and (iv)
C (ii) and (iii)
D (iii) and (iv) (8 x 1) (8)

1.2 Refer to the sketch below on the classification of settlements. Choose the correct term(s) from those given in brackets. Write only the term(s) next to the question numbers (1.2.1 to 1.2.7) in the ANSWER BOOK, e.g. 1.2.8 settlement.



[Source: Examiner's own diagram]

1.2.1 Settlements are ranked according to (function/population).

1.2.2 A (metropolis/conurbation) is made up of a city with independent towns.

1.2.3 A (village/town) is the smallest urban settlement.

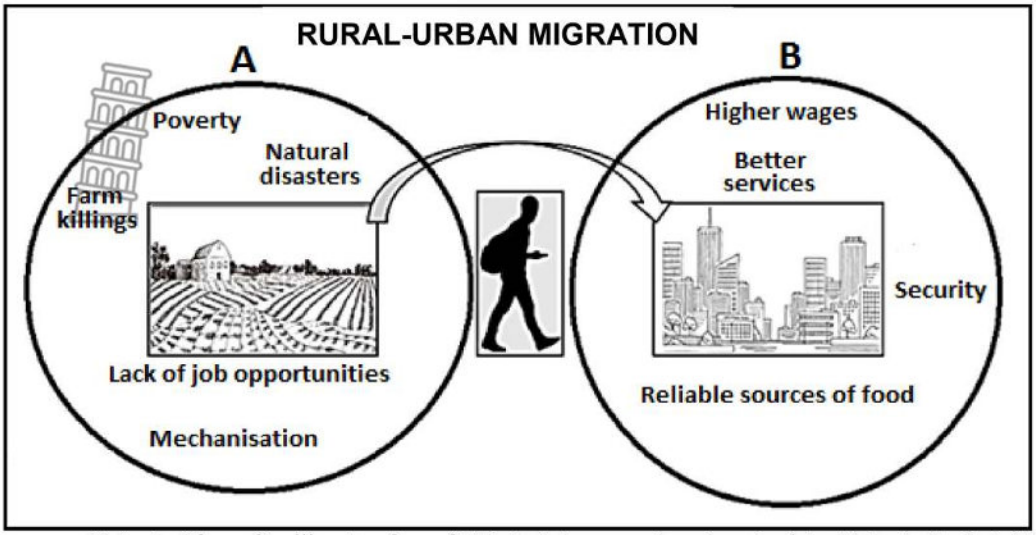
1.2.4 A (hamlet/village) has a mixture of both rural and urban functions.

1.2.5 The range of a (town/city) will be greater.

1.2.6 The (conurbation/metropolis) has a greater number of functions and size.

1.2.7 As the size of a settlement increases, the number of this type of settlement will (increase/decrease). (7 x 1) (7)

1.3 Refer to the sketch below on rural-urban migration.



[Adapted from file:///vector-farm-field-sketch-engraving-drawing/stockistockcitysketch]

1.3.1 Define the concept *rural-urban migration*. (1 x 2) (2)

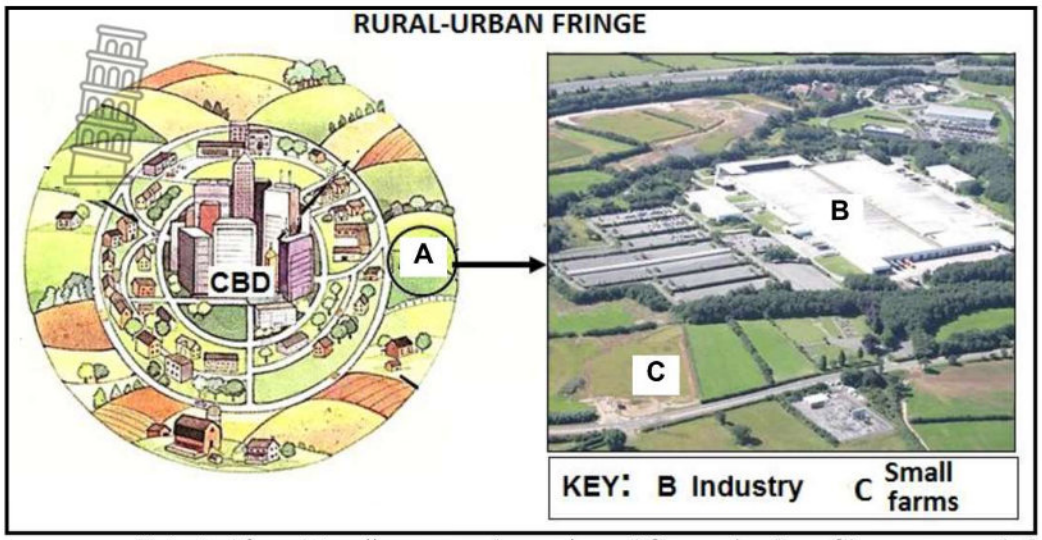
1.3.2 Identify ONE social push factor in **A** that causes rural-urban migration. (1 x 1) (1)

1.3.3 State TWO basic services that are more accessible in urban areas than in rural areas. (2 x 1) (2)

1.3.4 How can rural-urban migration create challenges for the provision of housing in **B**? (2 x 2) (4)

1.3.5 Suggest THREE intervention strategies that can be implemented to decrease rural-urban migration. (3 x 2) (6)

1.4 Refer to the sketch and the photograph below which show a part of area **A** in the rural-urban fringe.



[Adapted from https://www.google.com/search?q=rural+urban+fringe+geography]

1.4.1 Where is the rural-urban fringe located? (1 x 1) (1)

1.4.2 State TWO economic activities in the photograph, which are found in the rural-urban fringe. (2 x 1) (2)

1.4.3 How does the economic activity at **B** benefit from being located in the rural-urban fringe? (2 x 2) (4)

1.4.4 What positive impact does activity **B** have on the local community? (2 x 2) (4)

1.4.5 How has the recent urban expansion of large cities changed the rural-urban fringe? (2 x 2) (4)

1.5 Refer to the photograph and extract below on informal settlements.

INFORMAL SETTLEMENTS IN SOUTH AFRICA



Government reports suggest that between 2002 and 2021, informal settlements in South Africa increased from 300 to 2 180.

The poverty levels in informal settlements are evident in the tiny spaces, overcrowding and overlapping structures — conditions that create a conducive environment for the rapid spread of diseases.

The human settlements sector set a target of providing housing with basic services to 400 000 informal settlement households by 2018. According to government reports and statements, the targets have not been met.

[Adapted from https://mg.co.za/analysis/2020-06-25-policy-exists-but-shacklands]

1.5.1 Identify ONE characteristic of informal settlements visible in the photograph. (1 x 1) (1)

1.5.2 State TWO negative social impacts of informal settlements in the extract. (2 x 1) (2)

1.5.3 Give TWO economic reasons for the rapid increase in informal settlements. (2 x 2) (4)

1.5.4 In a paragraph of approximately EIGHT lines, explain why the government has failed to assist communities living in informal settlements. (4 x 2) (8)

[60]

QUESTION 2: ECONOMIC GEOGRAPHY OF SOUTH AFRICA

2.1 The questions below are based on industries. 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 (2.1.1 to 2.1.8) in the ANSWER BOOK, e.g. 2.1.9 D.

2.1.1 Manufacturing is an example of an activity in the … economic sector.

A primary
B secondary
C tertiary
D quaternary

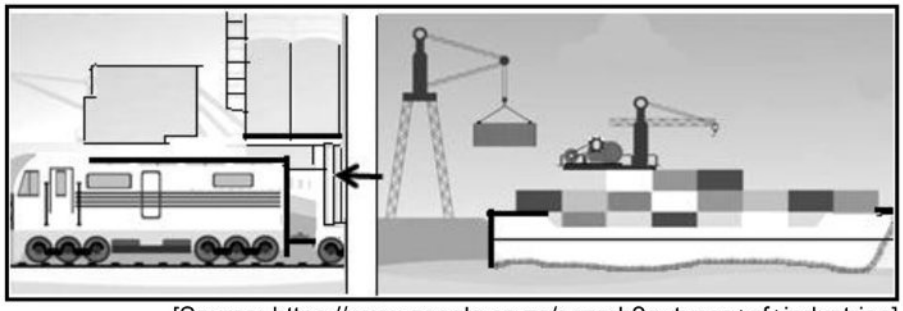
2.1.2 Light industries generally locate …

A close to the CBD.
B away from residential areas.
C near raw materials.
D near bulk transport.

2.1.3 An iron and steel plant is an example of a … industry.

A footloose
B break-of-bulk
C raw-material orientated
D market orientated

2.1.4 The sketch below illustrates a/an … industry.



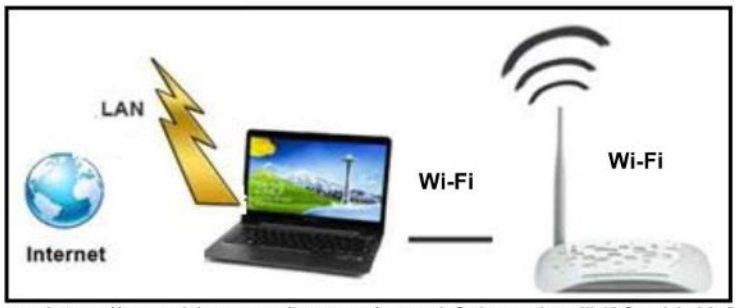
[Source: https://www.google.co.za/search?q=types+of+industries]

A ubiquitous
B bridge
C market
D footloose

2.1.5 A bakery is an example of a …industry.

A break-of-bulk
B raw-material orientated
C market orientated
D footloose

2.1.6 The illustration below is an example of a … industry.



[Source: https://www.bing.com/images/search?view=detailV2&ccid=Kq]

A raw-material orientated
B bridge
C market orientated
D ubiquitous

2.1.7 An oil refinery is an example of a/an … industry.

A footloose
B heavy
C ubiquitous
D light

2.1.8 Heavy industries are characterised by …

(i) high levels of air pollution.
(ii) their location on small areas of land.
(iii) their location close to bulk transport.
(iv) low levels of noise pollution.

A (i) and (ii)
B (i) and (iv)
C (ii) and (iii)
D (i) and (iii) (8 x 1) (8)

2.2 Choose the term/concept from COLUMN B that matches the statement in COLUMN A. Write only **Y** or **Z** next to the question numbers (2.2.1 to 2.2.7) in the ANSWER BOOK, e.g. 2.2.8 **Y**.

	COLUMN A		COLUMN B
2.2.1	An exchange of goods and services between countries	**Y** **Z**	international trade trade agreement
2.2.2	Unfavourable trade balance	**Y** **Z**	increases employment increases unemployment
2.2.3	Goods which are brought into a country	**Y** **Z**	exports imports
2.2.4	Benefit of international trade	**Y** **Z**	access to foreign currency decrease in investment
2.2.5	Activities of the tertiary sector	**Y** **Z**	transport and trade construction and research
2.2.6	An efficient public transport system	**Y** **Z**	increases economic cost increases production
2.2.7	Difference in value between a country's imports and exports	**Y** **Z**	balance of trade balance of payment

(7 x 1) (7)

2.3 Refer to the infographic below on sugar cane farming.

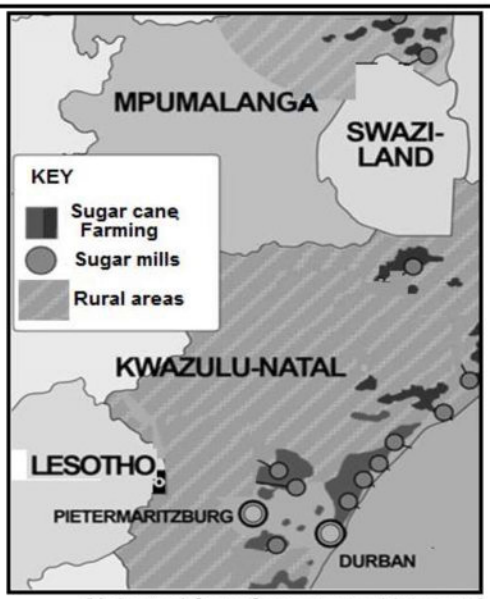
SUGAR CANE FARMING

Although the physical factors on the east coast of South Africa are conducive to sugar cane farming, the production has decreased. In two decades, the country's annual sugar production has shrunk by nearly 25%. The number of sugar cane farmers decreased by 60%.

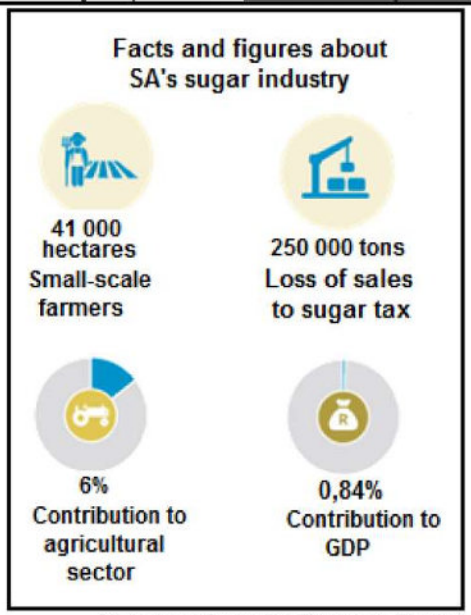
Many South African towns and rural villages would crumble, as they're either partly or entirely dependent on the sugar cane farming.

Demand for sugar in the Southern African Customs Union has dropped from 1,65 million tons to 1,25 million tons a year, forcing South Africa to increase its exports to the global market.

[Adapted from farmersweekly.co.za]



[Adapted from farmersweekly.co.za]



[Adapted from Dr Thomas Funke, *SA Cane Growers' Association*]

2.3.1 What is the percentage decrease in the number of sugar cane farmers in the last two decades? (1 x 1) (1)

2.3.2 Identify the TWO provinces on the map where sugar cane is farmed. (2 x 1) (2)

2.3.3 State TWO physical factors that promote sugar cane farming in these provinces (answer to QUESTION 2.3.2). (2 x 1) (2)

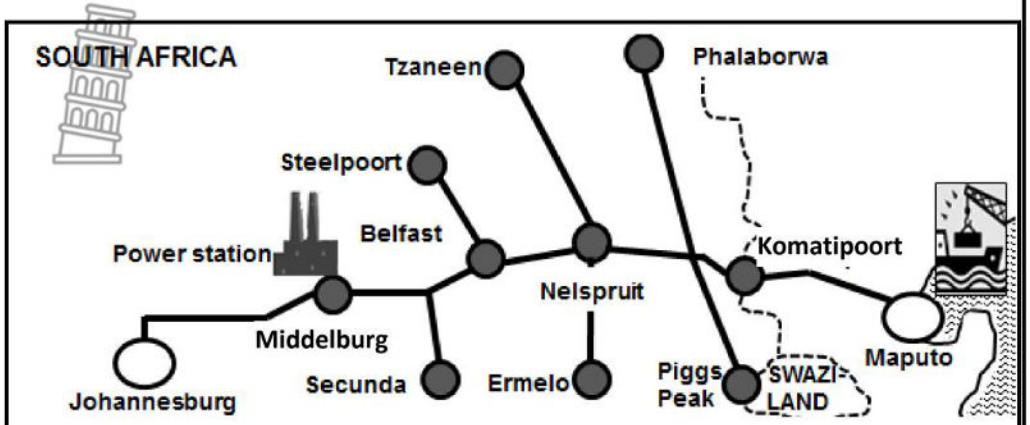
2.3.4 Why is sugar cane farming important to the small towns and rural villages in South Africa? (2 x 2) (4)

2.3.5 Explain THREE economic factors that have a negative impact on sugar production in South Africa. (3 x 2) (6)

Copyright reserved

2.4 Refer to the map and extract below on the Maputo Corridor Spatial Development Initiative (SDI).

MAPUTO CORRIDOR SPATIAL DEVELOPMENT INITIATIVE



Road Distance:	**Rail Distance:**
Johannesburg to Maputo: 581 km	**Johannesburg to Maputo: 590 km**

The Maputo Corridor was launched as a Spatial Development Initiative (SDI) in 1996, as the governments of South Africa and Mozambique initially sought to rebuild their economies and restore trade and investment ties. Both governments agreed on the enormous potential benefits of rehabilitating the key elements of this vital strategic transport corridor, which links the Port of Maputo with Africa's most vibrant economic hub, the city of Johannesburg. This Spatial Development Initiative was the means chosen to maximise investment in the potential of the Maputo Corridor and fulfil the aim of sustainable economic and social development along its length and surrounding areas.

[Adapted from bus-ex.com/https://www.bing.com/images/search?view=detailV2&ccid]

2.4.1 Which country is linked to South Africa by the Maputo Corridor Spatial Development Initiative? (1 x 1) (1)

2.4.2 What was the initial aim of launching the Maputo Corridor Spatial Development Initiative, as stated in the extract? (1 x 1) (1)

2.4.3 Name the core industrial region that will benefit the most from the Maputo Corridor Spatial Development Initiative. (1 x 1) (1)

2.4.4 How will the Maputo Corridor Spatial Development Initiative create business opportunities for underdeveloped communities along the corridor? (2 x 2) (4)

2.4.5 In a paragraph of approximately EIGHT lines, explain how the upgrading of the different types of infrastructure positively impacts on trade for the core industrial region (answer to QUESTION 2.4.3). (4 x 2) (8)

2.5 Refer to the cartoon and extract below on informal trading.

IN DEFENCE OF SOUTH AFRICA'S INFORMAL ECONOMY



A shadow economy*?

Some call the informal sector the shadow economy. They also complain about the lack of taxes paid by the informal sector. Many of the vendors are trading without permits and are subjected to regular raids by the city's law enforcement, during which their goods are seized and fines are issued.

The claim that official employment data underestimates the informal sector is based on the assumption that many people who undertake activities in the informal sector are mistakenly counted as unemployed.

The vast majority of informal operators (73%) earn well below the income tax threshold of R79 000 per annum set by the South African Revenue Service. In addition, many informal-sector workers, and particularly those in retail, pay VAT on their purchases.

***Shadow economy:** Its contribution is not known.

[Source: news.uct.ac.za/ https://www.google.com/search?q=informal+trading+cartoon]

2.5.1 Give another name for the informal sector from the extract. (1 x 1) (1)

2.5.2 Why does the trader in the cartoon not have a permit? (1 x 1) (1)

2.5.3 Quote ONE consequence from the extract for the trader who does not have a permit. (1 x 1) (1)

2.5.4 Why are people in the informal sector mistakenly referred to as unemployed? (1 x 2) (2)

2.5.5 How does the economy benefit from the informal sector? (2 x 2) (4)

2.5.6 Suggest THREE incentives that the government can provide to regulate the informal sector. (3 x 2) (6)

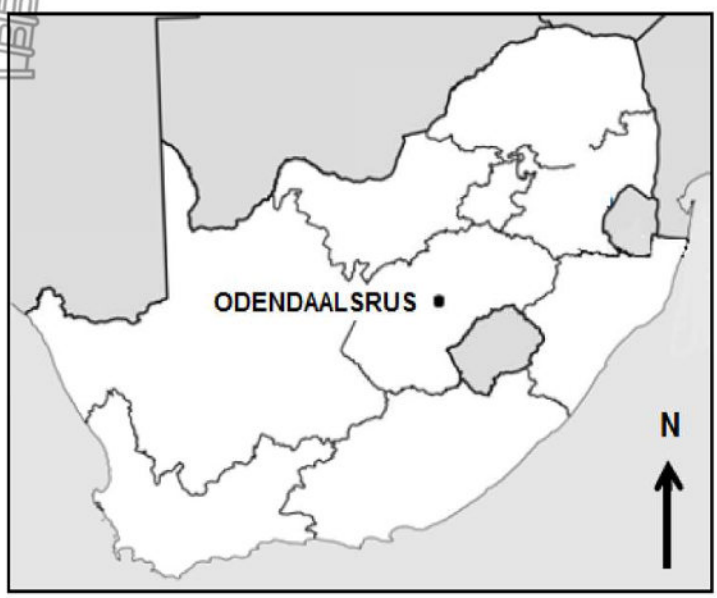
[60]

TOTAL SECTION A: 120

SECTION B

QUESTION 3: GEOGRAPHICAL SKILLS AND TECHNIQUES

BACKGROUND INFORMATION ON ODENDAALSRUS



Coordinates: 27°52'S; 26°41'E

Odendaalsrus is the oldest gold-mining town in the Goldfields of the Free State in South Africa.

The town was once just a variety of farms with one central church. However, when gold deposits were found in 1946, Odendaalsrus earned its place on the map, attracting a number of settlers who wanted to be a part of the gold rush. This is where the richest gold reef in the world was discovered.

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

The following English terms and their Afrikaans translations are shown on the topographic map:

ENGLISH	AFRIKAANS
River	Rivier
Bridge	Brug
Furrow	Voor

3.1 MAP SKILLS AND CALCULATIONS

Refer to the topographic map.

3.1.1 When calculating an area on the map, the scale is used to …

A represent the area on the topographic map.
B calculate the area in reality.
C represent the area on the orthophoto map.
D calculate the height of the area in reality. (1 x 1) (1)

3.1.2 Calculate the area which is demarcated in red/black on the topographic map in km².

Use the following information:

Measured length (map distance) = 3,7 cm

Formula: **Area = Length (L) x Breadth (B)** (4 x 1) (4)

3.1.3 The true bearing from trigonometrical station 286 (**F**) in block **B4** to spot height 1 357 (**G**) in block **C5** is (161°/342°). (1 x 1) (1)

3.1.4 Calculate the magnetic declination of Odendaalsrus for 2023. Use the information and steps given below.

Difference in years: 3 years
Mean annual change: 10' westwards
Total change:
Magnetic declination for 2023: (3 x 1) (3)

3.1.5 Use the answers to QUESTIONS 3.1.3 and 3.1.4 to calculate the magnetic bearing for 2023.

Formula:
Magnetic bearing = True bearing + Magnetic declination (1 x 1) (1)

3.2 MAP INTERPRETATION

Refer to the Phakisa Motor Race Track **(H)** in blocks **B3** and **C3** on the topographic map.

3.2.1 (a) In which land-use zone is the race track located? (1 x 1) (1)

(b) How does the location of the race track reduce possible environmental injustices to the residents of Odendaalsrus? (1 x 2) (2)

Refer to the topographic map and the orthophoto map.

3.2.2 (a) The main primary activity at **6** on the orthophoto map is (mining/quarrying). (1 x 1) (1)

(b) Give evidence from the topographic map to support your answer to QUESTION 3.2.2(a). (1 x 2) (2)

(c) Identify the transport infrastructure that supports the main primary activity at **6** on the orthophoto map. (1 x 1) (1)

Refer to the topographic map.

3.2.3 (a) Identify main street pattern I in blocks **A1** and **A2**. (1 x 1) (1)

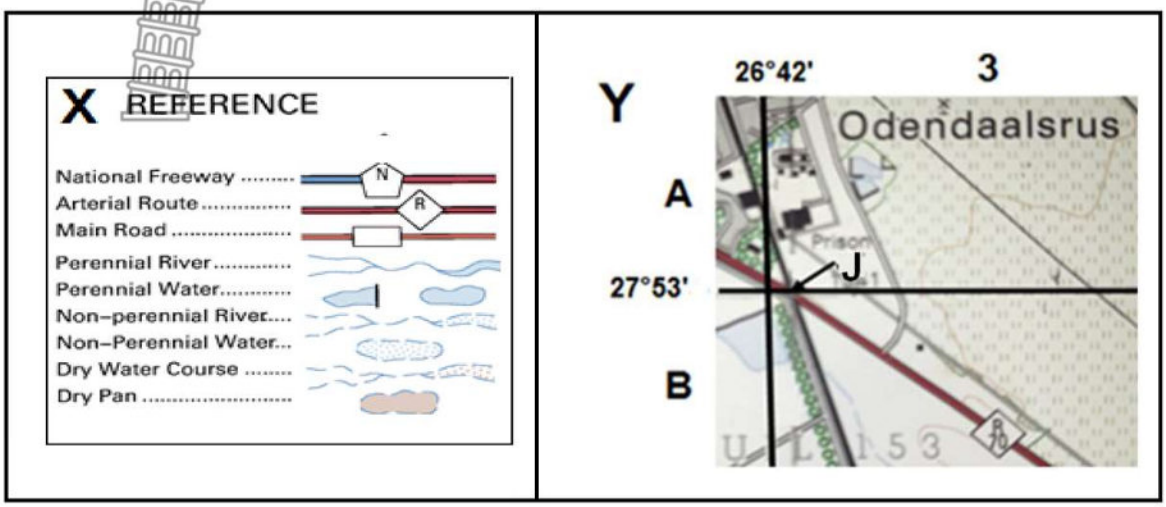
(b) Why is the street pattern, identified in QUESTION 3.2.3(a), associated with traffic congestion? (1 x 2) (2)

(c) How has the topography influenced the lay-out of the street pattern identified in QUESTION 3.2.3(a)? (1 x 2) (2)



3.3 GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

Reference information **X** and **Y** are extracts from the Odendaalsrus topographic map which indicates different types of data.



3.3.1 (a) The location of **J** is (spatial/attribute) data. (1 x 1) (1)

(b) Give the spatial data of **J** in degrees and minutes. (2 x 1) (2)

(c) How does reference information **X** assist in identifying the attribute data of the road in extract **Y**? (1 x 2) (2)

3.3.2 (Spatial resolution/Remote sensing) is used to collect information from a distance. (1 x 1) (1)

3.3.3 What is the advantage of collecting information from a distance for the activity at **6** on the orthophoto map? (1 x 2) (2)

TOTAL SECTION B: 30
GRAND TOTAL: 150

Copyright reserved