Province of the
EASTERN CAPE
EDUCATION

Iphondo leMpuma Kapa: Isebe leMfundo
Provinsie van die Oos Kaap: Departement van Onderwys
Porofensie Ya Kapa Botjhabela: Lefapha la Thuto

NATIONAL SENIOR CERTIFICATE

GRADE 12



SEPTEMBER 2024

GEOGRAPHY P2

MARKS: **150**

TIME: **3 hours**

This question paper consists of 17 pages.

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 subsections of questions answered.
5. Start EACH question at the top of a NEW page.
6. Number the questions 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

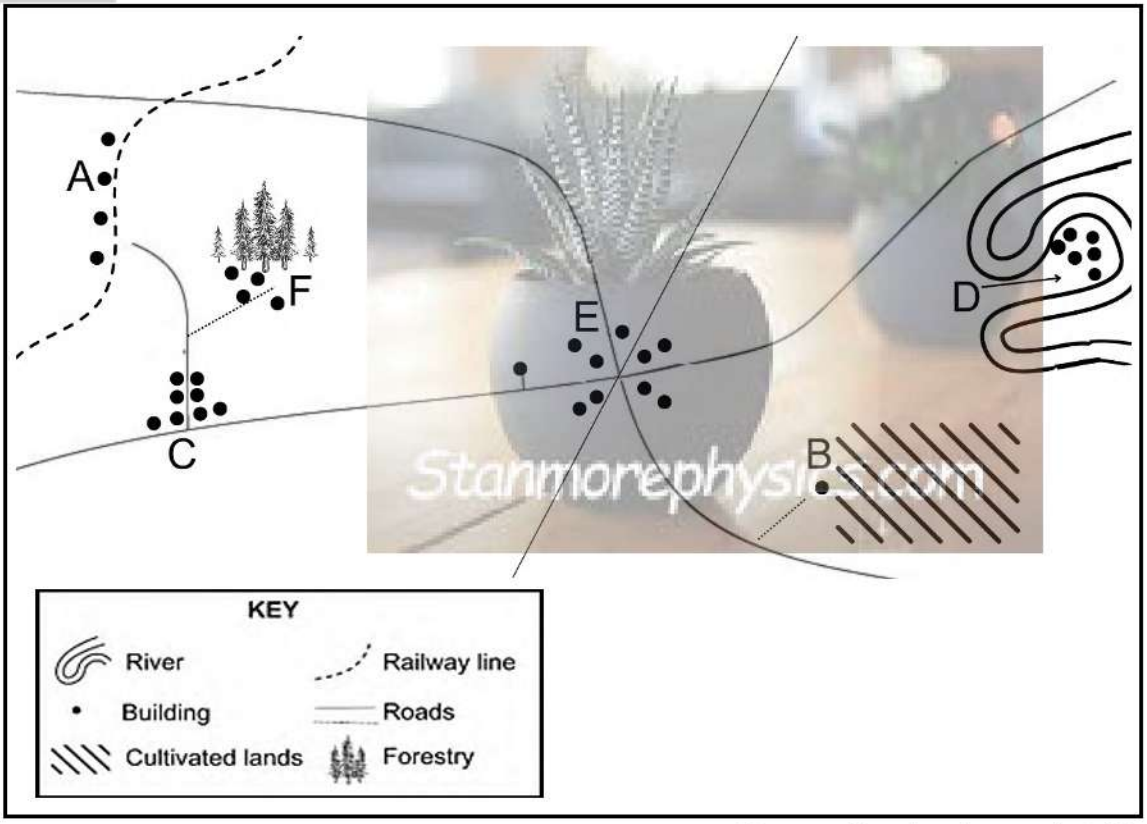
14. A 1 : 50 000 topographical map of 2527DB HARTBEESPOORT and a orthophoto map 1 : 10 000 2527DB 23HARTBEESPOORT of a part of the mapped area are provided.
15. The area demarcated in RED/BLACK on the topographic map represents the area covered by the orthophoto map.
16. Marks will be allocated for steps in calculations.
17. You must hand in the topographical and the orthophoto map to the invigilator at the end of this examination session.

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

QUESTION 1: RURAL AND URBAN SETTLEMENT

1.1 The sketch below shows the classification of rural settlements. Match the descriptions in QUESTIONS 1.1.1 to 1.1.8 with letters **A**–**F**. Write only the letters (A–F) next to the question numbers (1.1.1 to 1.1.8) in the ANSWER BOOK, for example 1.1.9 G. Letters can be repeated.



[Source: Examiner's own sketch]

1.1.1 A wet-point settlement.

1.1.2 A nucleated settlement that relies on a primary economic activity.

1.1.3 An isolated settlement that is an easy target for criminals.

1.1.4 A star-shaped crossroad settlement.

1.1.5 A farmstead that requires large amounts of capital.

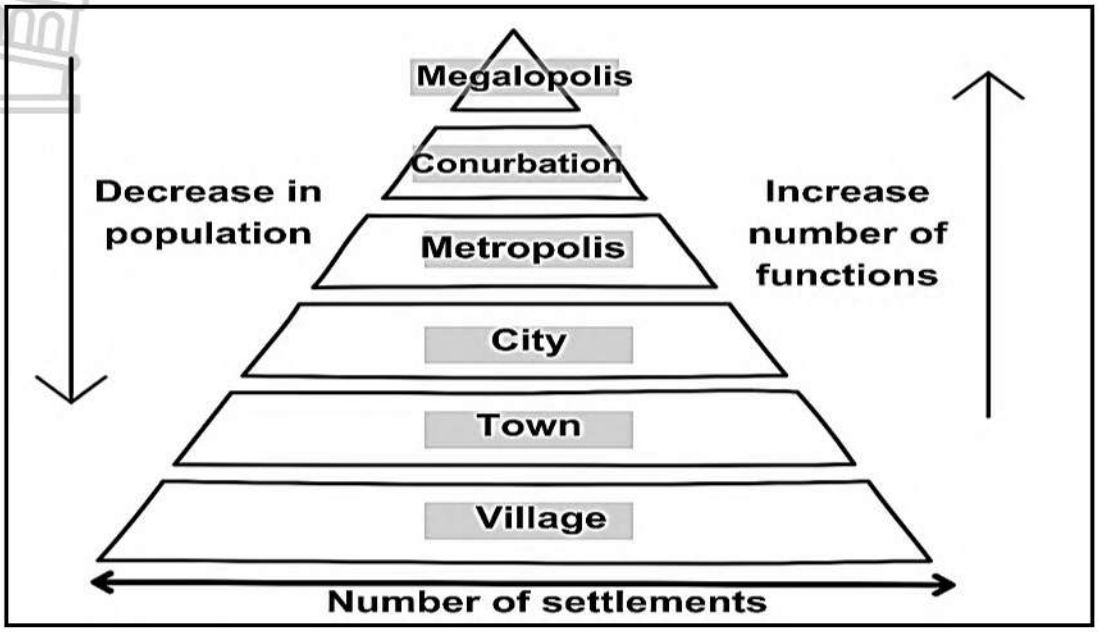
1.1.6 A T-shaped settlement.

1.1.7 A settlement that is linear in shape.

1.1.8 A settlement located in a meander loop for security reasons. (8 x 1) (8)

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 1.2.7) in the ANSWER BOOK, for example 1.2.8 D.

Refer to the sketch below showing the urban hierarchy to answer QUESTIONS 1.2.1 to 1.2.3.



[Adapted from: www.buddinggeographers.com/rural-and-urban-settlement]

1.2.1 Settlements are ranked according to …

A function.
B population.
C range.
D shape.

1.2.2 In comparison to a town, a city has a … population with … functions.

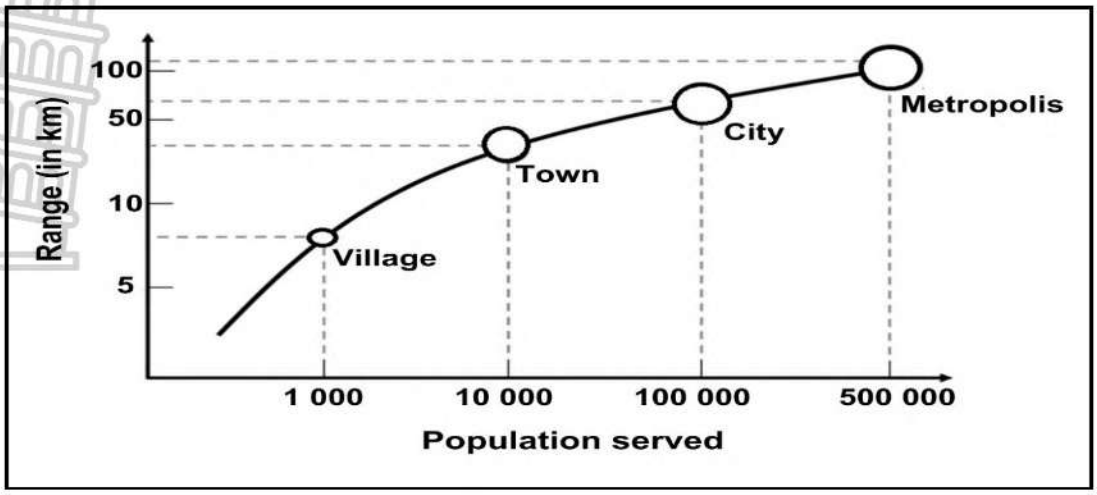
(i) larger
(ii) smaller
(iii) fewer
(iv) more

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

1.2.3 A megalopolis is characterised by:

A Being plentiful in a specific area
B Being the least complex
C Conurbations growing and joining together
D Having the smallest population

Refer to the sketch showing range and total population in different settlements to answer QUESTIONS 1.2.4 and 1.2.5.



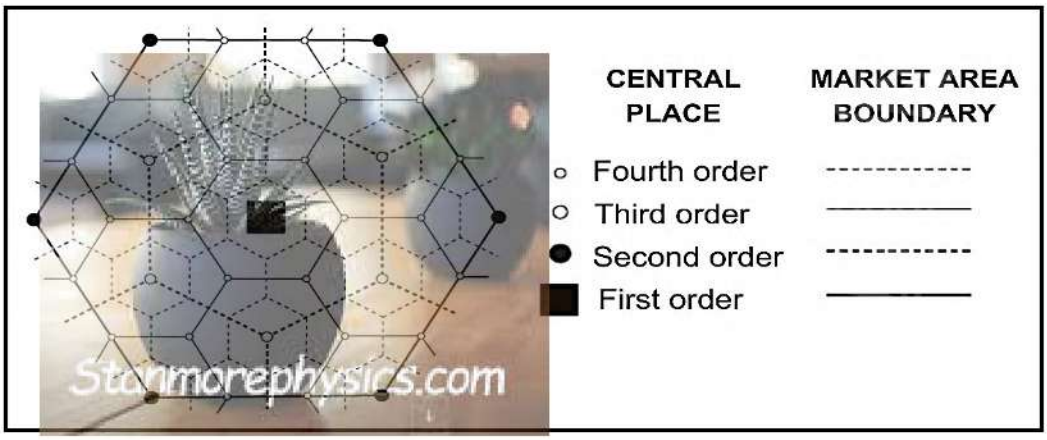
1.2.4 The range for low-order goods and services is smallest in a …

A town.
B city.
C metropolis.
D village.

1.2.5 The type of urban settlement that serves the highest number of people.

A Town
B City
C Metropolis
D Village

Refer to the sketch below showing the central place theory to answer QUESTIONS 1.2.6 and 1.2.7.



[Adapted from https://geography.name/classical-central-place-theory]

1.2.6 The lowest order settlement place is the … central place.

A first order
B second order
C third order
D fourth order

1.2.7 The … central place has the largest sphere of influence.

A first order
B second order
C third order
D fourth order (7 x 1) (7)

1.3 Refer to the extract below on land reform as a rural settlement issue.

WHY SOUTH AFRICA'S LAND REFORM POLICIES ARE FAILING

The government has spent over R56 billion towards buying property for land restitution efforts since 1994. This significant amount of money highlights the importance the government places on land reform in post-apartheid South Africa.

Through land restitution programmes, beneficiaries have the potential to develop agricultural farms, driving rural development through increased employment, wealth creation and economic growth.

However, there appears to be inadequate success of land reform programmes. Arguably, this has not been due to financial constraints as billions of funds have been allocated to it. The primary causes are attributed to the failure of policy implementation and provision of post-settlement support to beneficiaries.

[Adapted from www.foodformzansi.co.za/]

1.3.1 What is *land restitution*? (1 x 2) (2)

1.3.2 How much money has the South African government spent on land restitution since 1994? (1 x 1) (1)

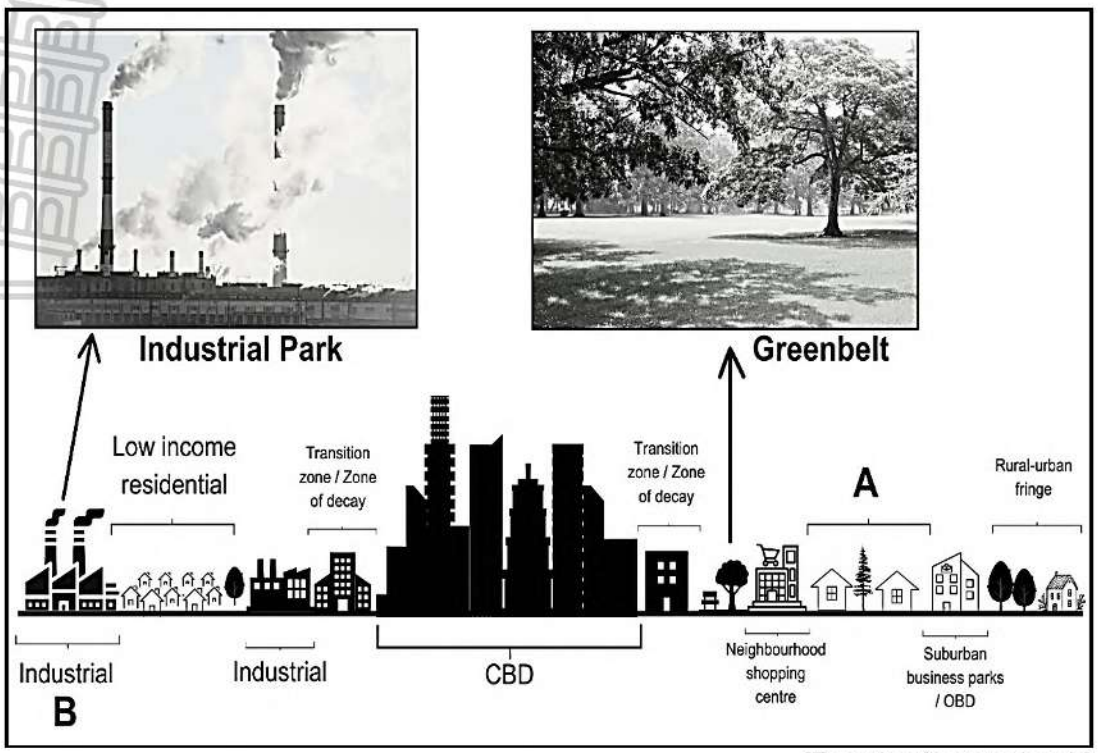
1.3.3 According to the extract, what are the benefits of well-managed land restitution? (2 x 1) (2)

1.3.4 Why is the success of land reform programmes a social justice issue? (1 x 2) (2)

1.3.5 In a paragraph of approximately EIGHT lines, suggest strategies that government can put into place to provide post-settlement support to beneficiaries. (4 x 2) (8)

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1.4 Refer to the sketch and photographs showing an urban profile.



[Examiner's own sketch]

1.4.1 The residential area **A** is a (high/low)-income residential area. (1 x 1) (1)

1.4.2 What evidence shows that land-use zone (answer to QUESTION 1.4.1) is compatible with the land-use zones around it? (2 x 1) (2)

1.4.3 Account for land-use zone **(B)** being located on the outskirts. (2 x 2) (4)

1.4.4 Why is the greenbelt an important land-use in the urban profile? (2 x 2) (4)

1.4.5 Explain why the CBD, despite its central location in this urban profile, is no longer as accessible to consumers (customers). (2 x 2) (4)

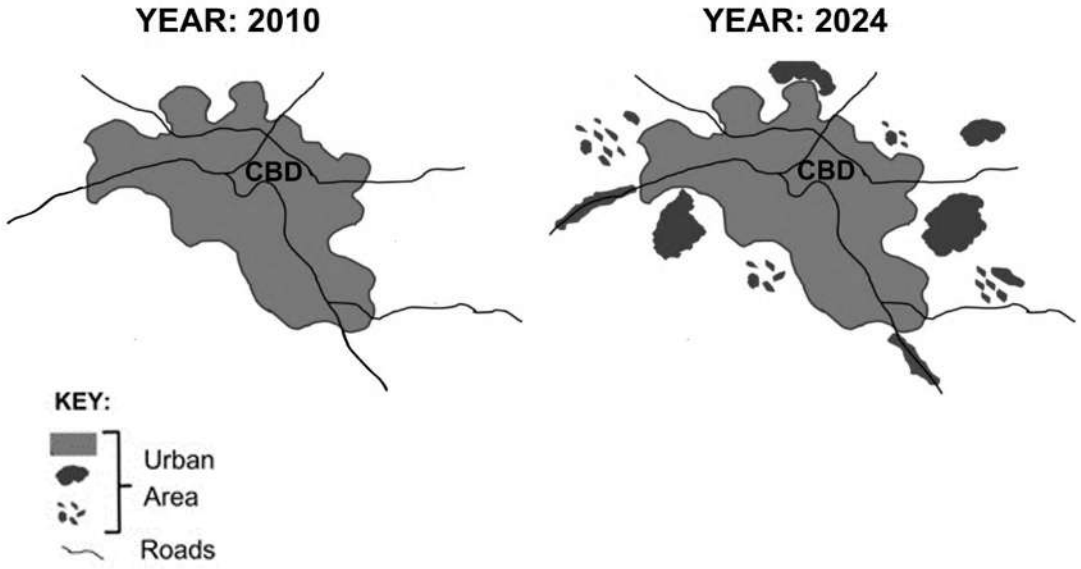
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1.5 Refer to the urban issue of urban sprawl.

JOHANNESBURG IS A TIMEBOMB AS URBAN SPRAWL CONTINUES

The urban sprawl, which has given birth to new 'cities' such as Waterfall City, Steyn City and Cosmo City, was always going to be a part of Johannesburg. Being South Africa's economic hub, Johannesburg has more than tripled its physical footprint in the past 30 years and is expected to become a 'megacity' by 2030.

In reality, the rapid urbanisation worldwide is creating more cities like Johannesburg, and the environmental costs are mounting. The problem with the urban sprawl in South Africa is that people living on the periphery bear the cost of the state's failure to plan for the rapid urbanisation.



[Adapted from www.news24.com/fin24/money/property/johannesburg]

1.5.1 Give evidence from the sketch that urban sprawl has taken place. (1 x 1) (1)

1.5.2 What is the main cause of rapid urbanisation? (1 x 2) (2)

1.5.3 How has rapid urbanisation contributed to urban sprawl? (1 x 2) (2)

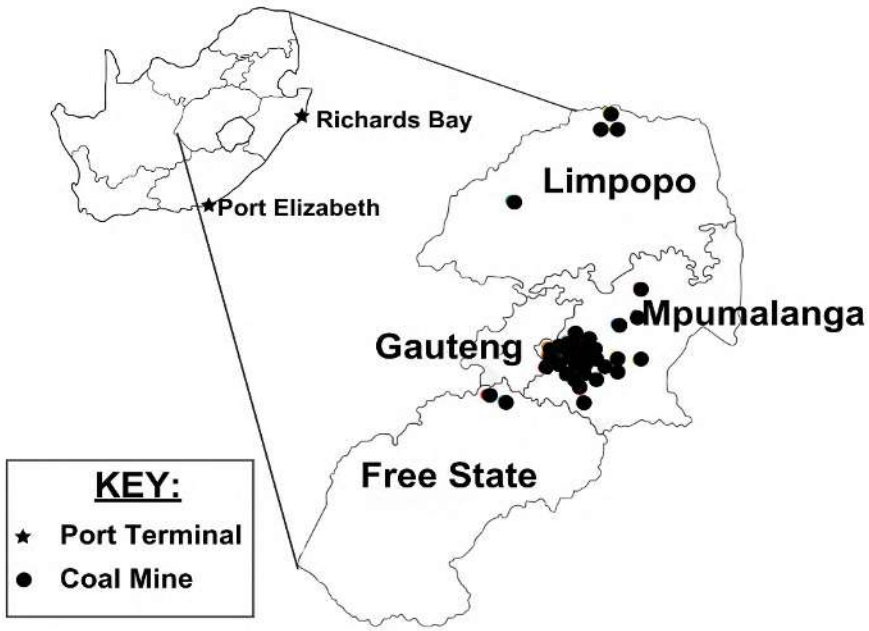
1.5.4 Why do local authorities find it difficult to control urban sprawl? (2 x 2) (4)

1.5.5 What unfavourable environmental conditions are caused by urban sprawl in the rural-urban fringe? (3 x 2) (6)

[60]

QUESTION 2: ECONOMIC GEOGRAPHY OF SOUTH AFRICA

2.1 Refer to the map and data based on coal mining. Complete the statements in COLUMN A with the options in COLUMN B. Write only **X** or **Z** next to question numbers (2.1.1 to 2.1.7) in the ANSWER BOOK, e.g. 2.1.8 Z.



COAL MINING	2022	2023
Direct employees	91 790	94 531
Employee earnings (billions)	R32,1	R33,9
Production (million tonnes)	230,1	228,5
Total sales (billions)	R2 347	R1 922

[Adapted from mineralscouncil.org.za/sa-mining/coal]

COLUMN A		COLUMN B	
2.1.1	The province accounting for over 80% of coal production.	**X** **Z**	Mpumalanga Gauteng
2.1.2	The main coal-port terminal through which coal is exported.	**X** **Z**	Port Elizabeth Richards Bay
2.1.3	The main use of coal in the PWV industrial region is for …	**X** **Z**	electricity generation steel production
2.1.4	Physical factors favouring coal mining:	**X** **Z**	Cheap, abundant labour Shallow, high-quality coal
2.1.5	The process of coal beneficiation is classified as a … economic activity.	**X** **Z**	primary secondary
2.1.6	From 2022 to 2023 there has been a/an … of 2,9% in direct employment.	**X** **Z**	decrease increase
2.1.7	The 2022–2023 trend in coal sales will … affect foreign exchange earnings.	**X** **Z**	positively negatively

(7 x 1) (7)

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2.2 The photographs below show examples of different industries. Match each description in QUESTIONS 2.2.1 to 2.2.8 with the photographs. Write only OIL REFINERY or BAKERY next to the question numbers (2.2.1 to 2.2.8) in the ANSWER BOOK, for example 2.2.9 Bakery.

OIL REFINERY



BAKERY



[Source: https://www.iol.co.za/business-report/economy]

2.2.1 Break of bulk industry

2.2.2 Large-scale mass production

2.2.3 Occupies a small area of land

2.2.4 Located on urban periphery

2.2.5 Market oriented industry

2.2.6 Relies on road transportation

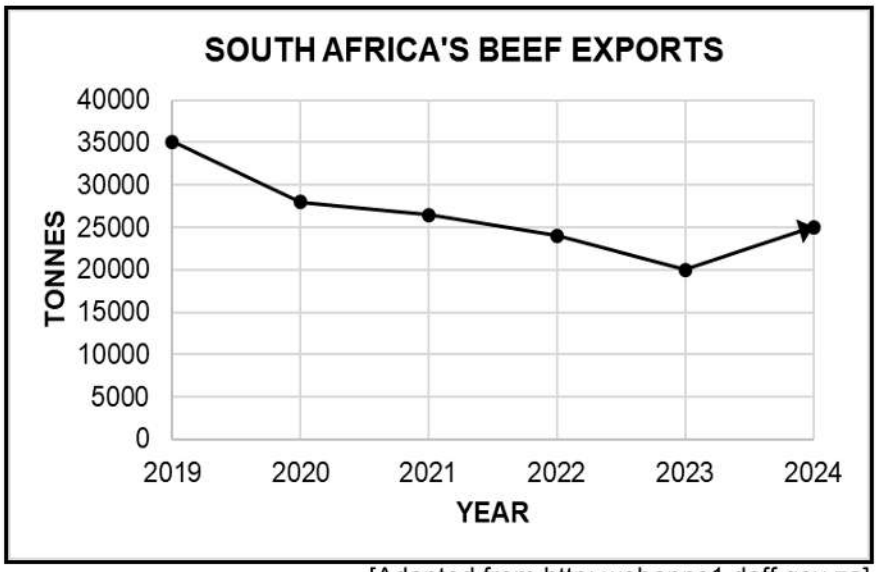
2.2.7 Associated with low levels of pollution

2.2.8 Requires larger amounts of energy and water (8 x 1) (8)

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2.3 Refer to the infographic on beef farming in South Africa.

PROVINCIAL BEEF PRODUCTION (%)	
Western Cape	4%
Northern Cape	3,6%
North West	12,8%
Mpumalanga	9,6%
Limpopo	7,2%
Kwa-Zulu Natal	20%
Gauteng	2%
Free State	16,8%
Eastern Cape	24%



[Adapted from http: webapps1.daff.gov.za]

With 80% of South Africa's agricultural land considered to be suitable for extensive grazing, beef farming contributes to 34,1% to the total domestic agricultural production. But recently South Africa's beef industry has been hit with increased operational costs and the spread of disease such as foot-and-mouth.

Fortunately, beef exports in 2024 are set to increase following Saudi Arabia's decision in 2023 to lift the ban on beef products from South Africa. The opening of this new export market will positively affect the country's economy.

[Adapted from www.arc.agric.za/]

2.3.1 Identify the TWO provinces that contribute the highest percentages to South Africa's beef production. (2 x 1) (2)

2.3.2 State the general trend with regard to South Africa's beef exports between 2019 to 2023, as shown on the graph. (1 x 1) (1)

2.3.3 Give evidence from the extract that in recent years the South African beef industry was negatively influenced (affected) by:

(a) A physical factor

(b) An economic factor (2 x 1) (2)

2.3.4 How can small-scale beef farming contribute to household food security? (2 x 2) (4)

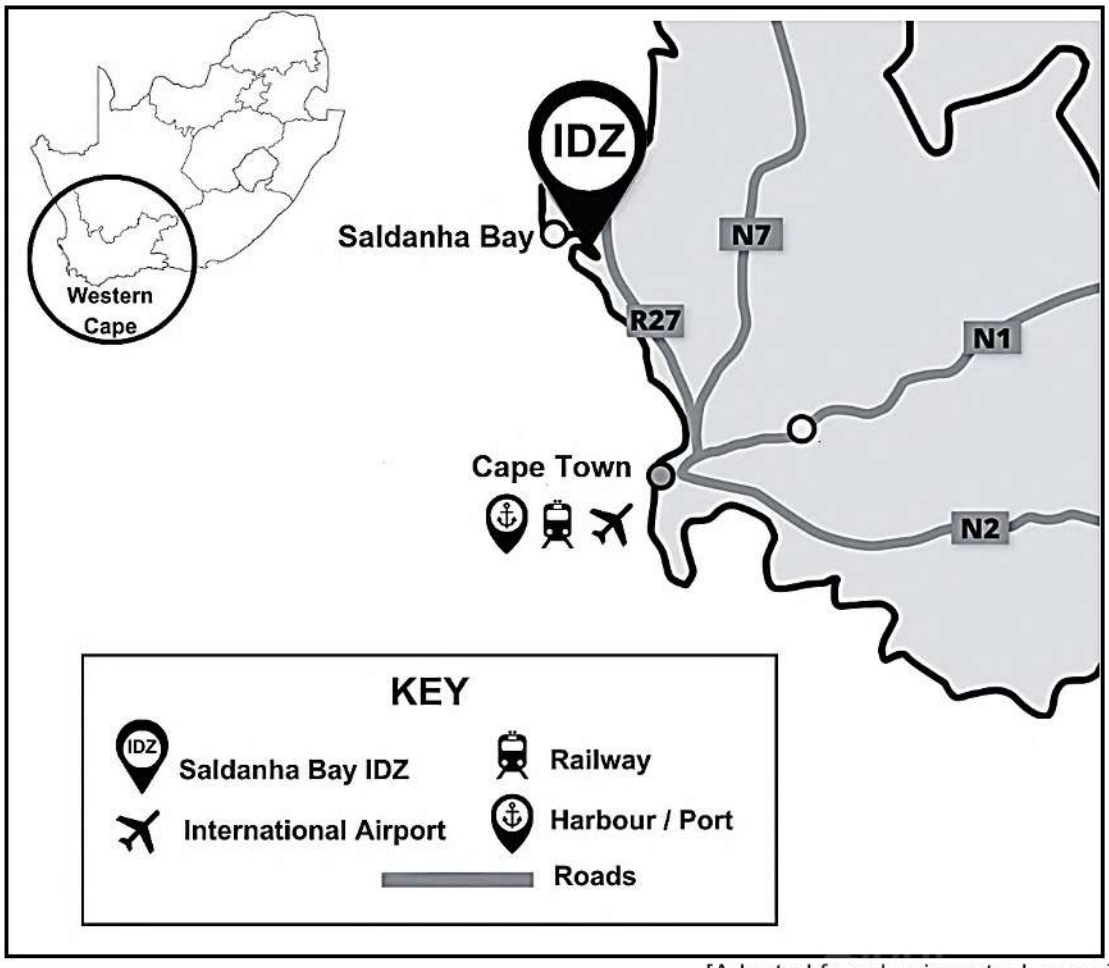
2.3.5 Why will a new beef export market positively affect the country's economy? (3 x 2) (6)

2.4 Refer to the extract and map on the Saldanha Bay Industrial Development Zone (IDZ).

INFRASTRUCTURE INVESTMENT: KEY FOR ECONOMIC DEVELOPMENT

The Saldanha Bay Industrial Development (IDZ) is located within the port of Saldanha Bay, the largest natural, deep-water port in the Southern Hemisphere. The provision of world-class port infrastructure, specifically designed to attract investments, is dedicated to maritime, energy, logistics and engineering industries.

Recently, the access road to the IDZ, at a cost of R24 million, was completed and will provide a more direct road for industrial traffic to the IDZ with improved mobility and safety.



[Adapted from businesstech.co.za]

2.4.1 In which province is the Saldanha Bay IDZ located? (1 x 1) (1)

2.4.2 From the extract, state TWO industries that the IDZ's port infrastructure supports. (2 x 1) (2)

2.4.3 What positive social contributions do these industries (answer to QUESTION 2.4.2) make? (2 x 2) (4)

2.4.4 Explain how the infrastructure makes industries more competitive in the South-Western Cape industrial region. (4 x 2) (8)

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2.5 Refer to the extract on the informal sector.

SOUTH AFRICA'S INFORMAL SECTOR IS BOOMING

The South Africa informal sector, estimated to be valued at R750 billion, has always played a vital role in absorbing South Africa's large unemployed population, providing a living for those who cannot find a job and supplementing the income of those on low wages.

The South African informal sector is dominated by spaza shops* estimated to be worth around R180 billion annually. With more than 150 000 spaza shops, research shows that around 11,1 million South African's do their grocery shopping at these stores, citing convenience and lower prices as the main pull factor.

The informal economy is growing strongly, and it is estimated that the growth of its retail sector to be almost double that of its formal counterpart.



Glossary:
A spaza shop is an informal convenience shop business, usually run from home.

[Adapted from https://dailyinvestor.com/south-africa/56895/south-africas-hidden-r750-billion-economy]

2.5.1 What is an *informal sector*? (1 x 2) (2)

2.5.2 How much is the estimated value of the South African informal sector? (1 x 1) (1)

2.5.3 According to the extract, how does the informal sector benefit South African consumers (shoppers)? (2 x 1) (2)

2.5.4 Why are spaza shops easy businesses to own? (2 x 1) (2)

2.5.5 How will the growth of spaza shops benefit South Africa's formal sector? (2 x 2) (4)

2.5.6 Explain the economic challenges faced by spaza shop owners in South Africa. (2 x 2) (4)

[60]

TOTAL SECTION A: 120

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SECTION B

QUESTION 3: GEOGRAPHICAL SKILLS AND TECHNIQUES

GENERAL INFORMATION ON HARTBEESPOORT



N

Coordinates: 25°43′32″S 27°50′54″E

Hartbeespoort, informally also known as “Harties”, is a small resort town in the North West Province of South Africa, situated on the banks of the Hartbeespoort Dam.

Hartbeespoort is the collective name of a few smaller towns situated around the Hartbeespoort, including the towns of Meerhof, Ifafi, Melodie, Schoemansville, and Kosmos. A number of high-income residential estates can be found alongside its shores.

Because of its location (approximately 35 kilometers north west of Johannesburg and 20 kilometers west of Pretoria), Hartbeespoort has become a very popular holiday and weekend destination. It is the principal water recreation area of Northern Gauteng and many types of water sports are enjoyed on the dam.

[Source: https://en.wikipeda.org/wiki/Hartbeespoort]

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

ENGLISH	AFRIKAANS
Golf course	Gholfbaan
Holiday resort	Vakansie-oord

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3.1 MAP SKILLS AND CALUCATIONS

3.1.1 Hartbeespoort is classified as a(n) … specialised town.

A mining
B military
C resort
D industrial (1)

3.1.2 Johannesburg is in a(n) … direction from Haartbeespoort.

A north-westerly
B easterly
C westerly
D south-easterly (1)

Refer to the topographical map to answer QUESTION 3.1.3 to 3.1.5.

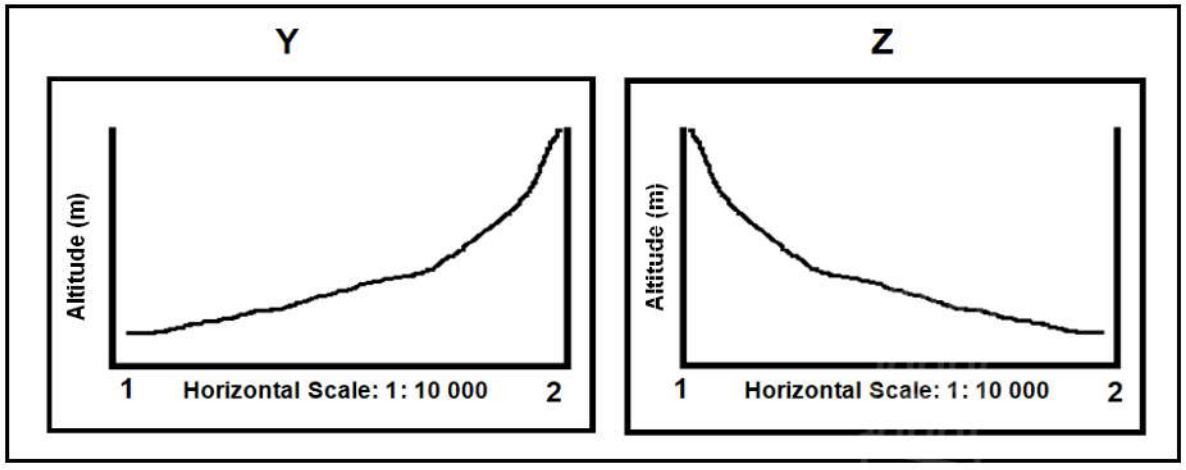
3.1.3 Calculate the true bearing from trigonometrical station 66 in block **A5** to spot height 1465 in block **B3**. (1 x 1) (1)

3.1.4 The magnetic declination in 2024 is 24°46' west of true north.

Use your answer from QUESTION 3.1.3 to calculate the present magnetic bearing from trigonometrical station 66 in block **A5** to spot height 1465 in block **B3.** (2 x 1) (2)

3.1.5 Why will the magnetic bearing in 2024, between these two points, be larger than in 2017? (1 x 1) (1)

Refer to **1** and **2** on the orthophoto map.



3.1.6 Which graph **(Y** or **Z)** represents the cross-profile of **1** to **2?** (1 x 1) (1)

3.1.7 Calculate the vertical exaggeration (VE) of the cross profile if the vertical scale is 1 cm represents 20 m.

$$\textbf{Vertical Exaggeration (VE)} = \frac{\textbf{Vertical Scale (VS)}}{\textbf{Horizontal Scale (HS)}}$$

(3 x 1) (3)

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3.2 MAP INTERPRETATION

Refer to blocks **A1** and **A2** on the topographical map

3.2.1 What is the dominant primary economic activity? (1 x 1) (1)

3.2.2 Name TWO site factors that favoured the primary economic activity (answer to QUESTION 3.2.1). (2 x 1) (2)

Refer to the demarcated area **X** (in blocks **C1** and **C2)** on the topographical map and the photograph below which shows the same area **(X)** to answer QUESTIONS 3.2.3 and 3.2.4.



[Adapted from https://www.google.com/map]

3.2.3 Name ONE tertiary activity that is associated with the Hartbeespoort Dam. (1 x 1) (1)

3.2.4 How does this tertiary activity contribute to the area's economy? (1 x 2) (2)

Refer to the built-up area of Kosmos at **Y** (blocks **C2** and **C3**) on the topographical map.

3.2.5 Identify ONE characteristic of the irregular (planned) street pattern. (1 x 1) (1)

3.2.6 How has this street pattern accommodated the surrounding natural environment? (1 x 2) (2)

Refer to the Pecanwood Golf Estate (**D3** and **E3**) on the topographical map.

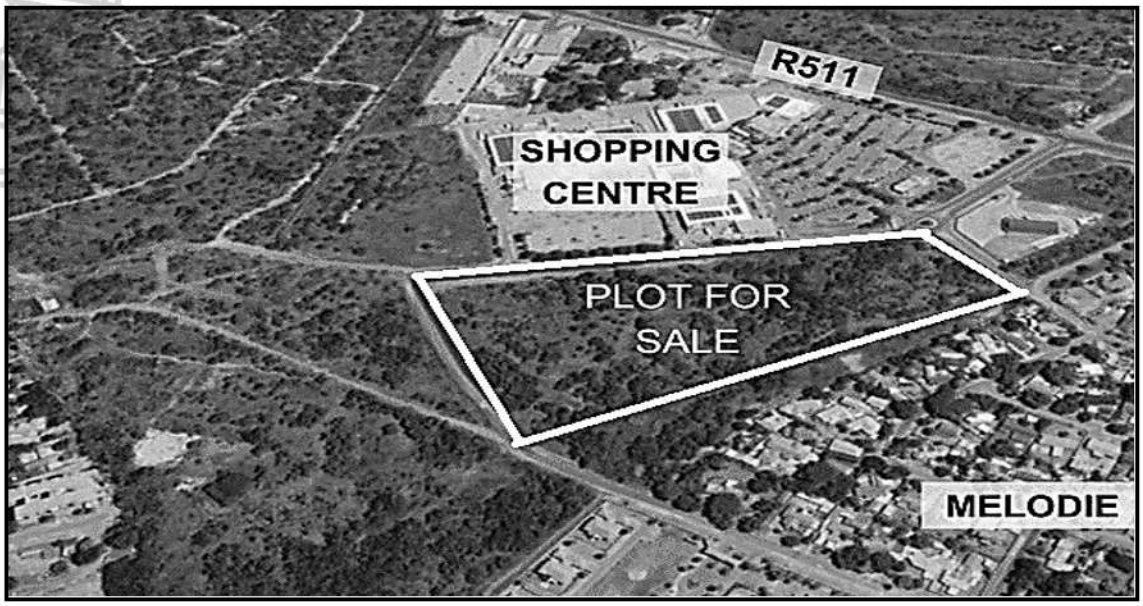
3.2.7 Based on what attraction feature has this high-income residential estate been built? (1 x 1) (1)

3.2.8 What social factor has contributed to the growing trend of gated communities such as Peacanwood Golf Estate? (1 x 2) (2)

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3.3 GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

Refer to the photograph showing a plot of land for sale (**Z** in block **B5** on the topographical map).



[Adapted from www.remax.co.za/property/for-sale/south-africa/north-west/hartbeespoort/]

3.3.1 The photograph is a (vertical / oblique) aerial photograph. (1 x 1) (1)

3.3.2 What is *remote sensing*? (1 x 2) (2)

3.3.3 The photograph is a (raster or vector) image. (1 x 1) (1)

3.3.4 What type of spatial object is the demarcated plot that is for sale? (1 x 1) (1)

3.3.5 The R511 road is a tarred road. From this statement, what attribute data can be obtained? (1 x 1) (1)

3.3.6 Explain why an urban developer, who is interested in expanding the shopping centre, would choose to use an aerial photograph (such as this one) to obtain more information. (1 x 2) (2)

[30]

TOTAL: 150

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