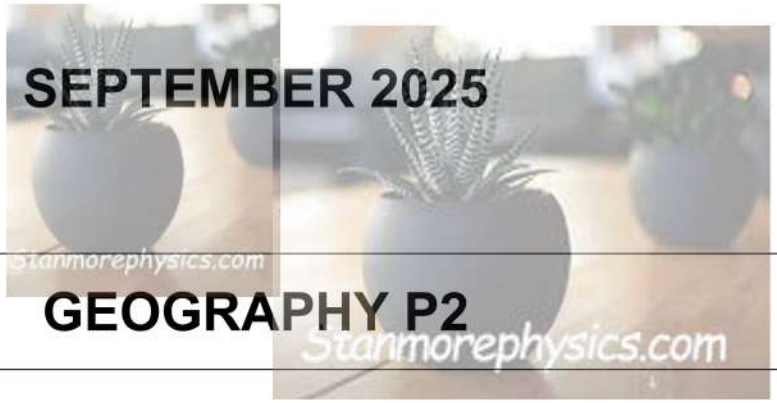
Province of the
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EDUCATION

NATIONAL SENIOR CERTIFICATE

GRADE 12



GEOGRAPHY P2

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MARKS: 150

TIME: 3 hours

This question paper consists of 20 pages.

INSTRUCTIONS AND INFORMATION

1. This question paper consists of TWO SECTIONS.

   SECTION A:
   QUESTION 1: RURAL AND URBAN SETTLEMENTS (60)
   QUESTION 2: THE 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.

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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 a 1 : 10 000 orthophoto map 2725DC 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.

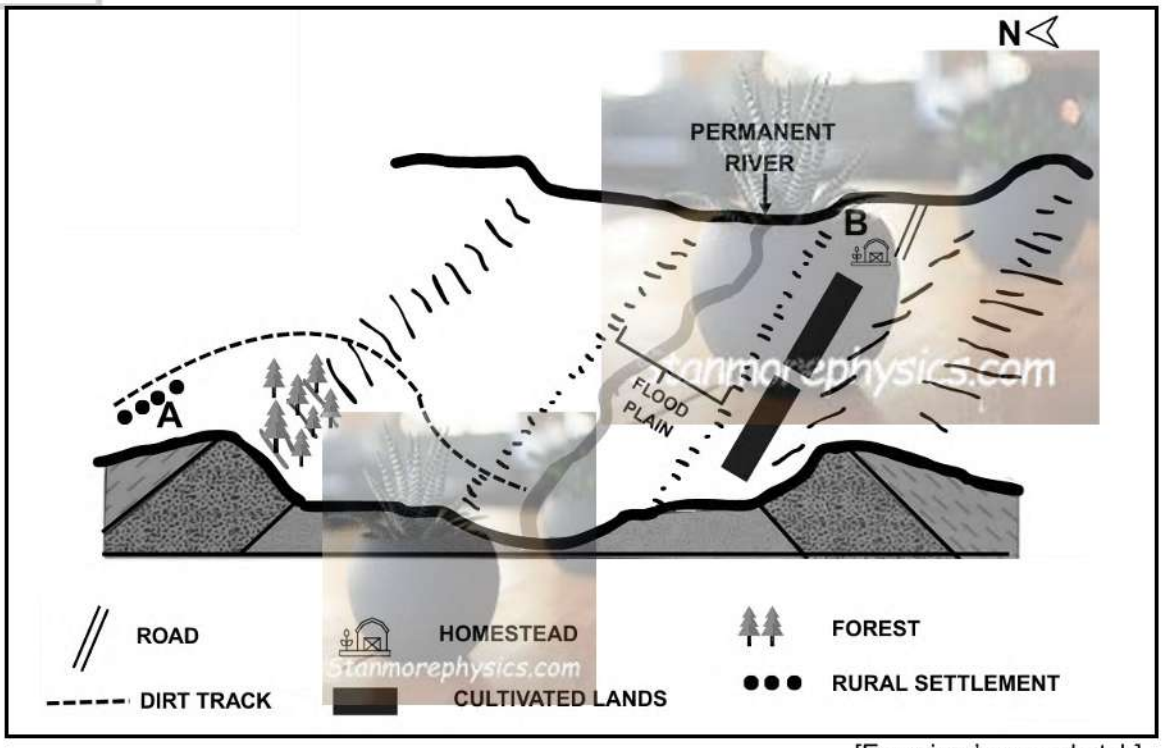
17. You must hand in the topographical and the orthophoto map to the invigilator at the end of this examination session.

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

QUESTION 1: RURAL AND URBAN SETTLEMENTS

1.1 Refer to the sketch below showing rural settlements **(A** and **B)** located in the southern hemisphere. Complete the statements in COLUMN A with the options in COLUMN B. Write only **Y** or **Z** next to question numbers (1.1.1 to 1.1.8) in the ANSWER BOOK, for example 1.1.9 Z.



[Examiner's own sketch]

COLUMN A	COLUMN B
1.1.1 Settlement **B** is a … settlement.	**Y** dry-point **Z** wet-point
1.1.2 The site of settlement **A** is influenced by its location on a … slope	**Y** south-facing **Z** north-facing
1.1.3 The land use associated with settlement **B** is …	**Y** agriculture **Z** forestry
1.1.4 The shape of settlement **A** is …	**Y** crossroad **Z** linear
1.1.5 A social disadvantage of settlement **B** is …	**Y** less safety **Z** less profit
1.1.6 Settlements **A** and **B** are…	**Y** unifunctional **Z** multifunctional
1.1.7 The physical factor that influenced the site of a settlement **B**…	**Y** road access **Z** fertile soil
1.1.8 The nucleated settlement pattern:	**Y** Settlement A **Z** Settlement B

(8 x 1) (8)

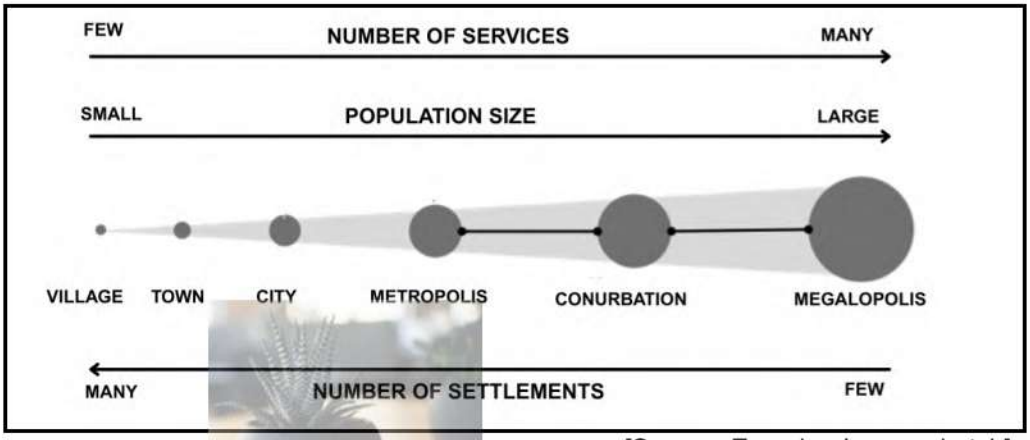
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1.2 Various options are provided as possible answers to the following questions. Choose the answer and write only the letter (A-D) next to the question numbers (1.2.1 to 1.2.7) in the ANSWER BOOK, e.g. 1.2.8 D.

1.2.1 A settlement's position on the urban hierarchy is determined by…

A population size.
B physical size.
C function.
D location.

Refer to the sketch below to answer QUESTIONS 1.2.2 and 1.2.3



[Source: Examiner's own sketch]

1.2.2 A … has the least number of settlements.

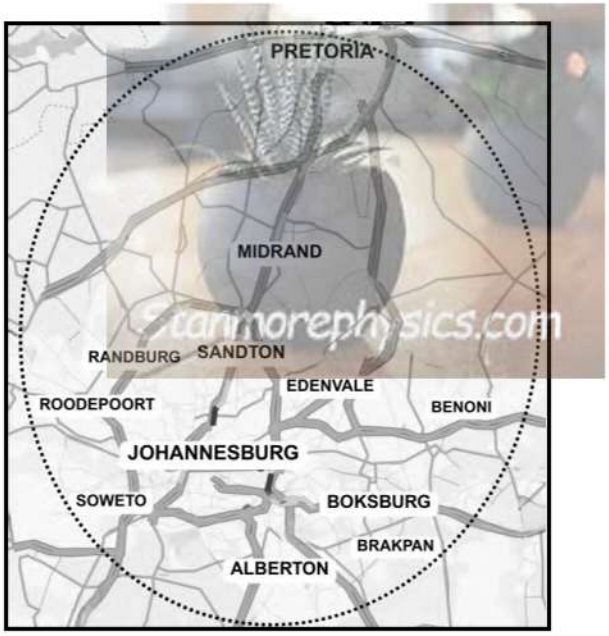
A village
B Town
C Megalopolis
D Metropolis

1.2.3 Compared to a city, a metropolis has a … population with … functions.

A smaller; fewer
B larger; more
C smaller; more
D larger; fewer

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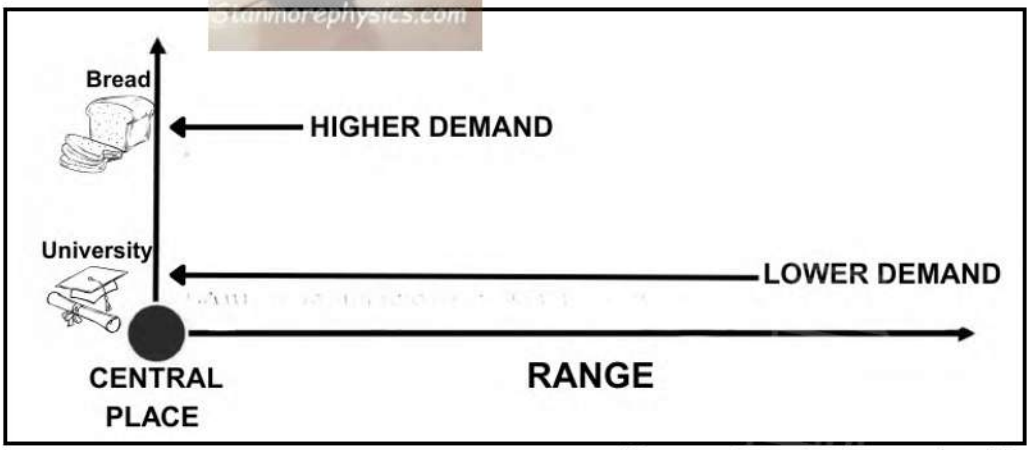
1.2.4 South Africa's highest ranked urban settlement as depicted below is a:



[Adapted from https://ui.adsabs.harvard.edu]

A Megalopolis
B Conurbation
C Metropolis
D Metropolitan

Refer to the sketch below to answer QUESTIONS 1.2.5 to 1.2.7.



[Source: Examiner's own sketch]

1.2.5 A … is an urban area providing goods and services to the surrounding rural population.

A specialised city
B central city
C gateway settlement
D central place

1.2.6 Bread is a … good which is frequently purchased because of its … demand.

(i) high-order
(ii) low-order
(iii) high
(iv) low

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

1.2.7 A university has a … threshold population and its range is typically …

(i) low
(ii) high
(iii) small.
(iv) large.

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



(7 x 1) (7)

1.3 Refer to the extract and cartoon on land reform as a social justice issue.

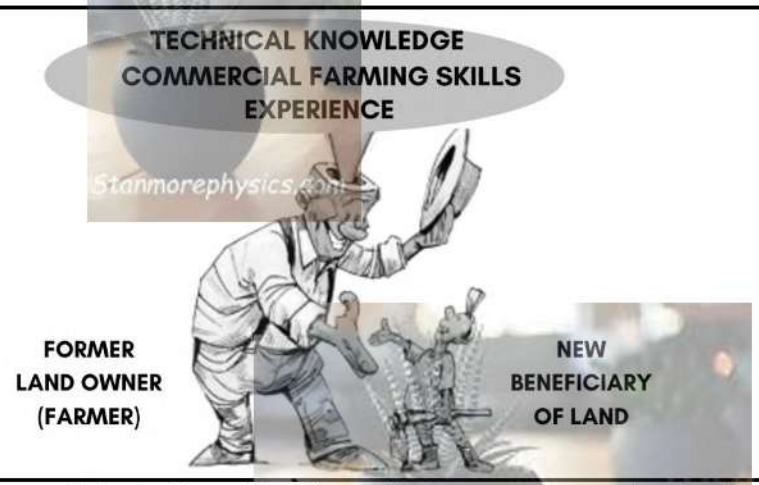
MATSAMO CPA PROJECTS: A LAND REFORM SUCCESS

With nearly 75% of South African land reform projects considered unproductive, the Matsamo Community Property Association (CPA) in Mpumalanga represents one of the few success stories.

In 1998, close to 2 000 families from the Matsamo community submitted land claims. Eventually the government began restituting the first plots in 2010 through the "willing buyer, willing seller" policy. To ensure the land remained productive, the beneficiaries partnered with the former (previous) farm owners.

Today, the Matsamo CPA manages over 13,000 hectares of land which is divided into 25 parcels. The estimated total value of land is around R1 billion and is used for the commercial production of crops.

The success of these partnerships shows how effective cooperation between new land beneficiaries and the former land owners can contribute meaningfully to land reform in South Africa.



[Adapted from https://www.farmersweekly.co.za/opinion/by-invitation]

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

1.3.2 Quote evidence from the passage that indicates that successful land reform cases in South Africa are rare (uncommon). (1 x 1) (1)

1.3.3 Why can the 'willing buyer, willing seller' policy slow down land reform efforts in South Africa? (1 x 2) (2)

1.3.4 From the cartoon, identify TWO benefits of the partnership for the beneficiaries. (2 x 1) (2)

1.3.5 In a paragraph of approximately EIGHT lines explain the importance of collaboration (partnerships) (answer to QUESTION 1.3.4) in supporting the aim of land reform. (4 x 2) (8)

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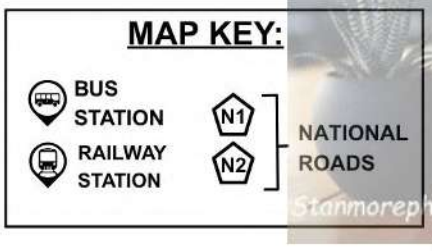
1.4 Refer to the information on land-use zones in Cape Town.

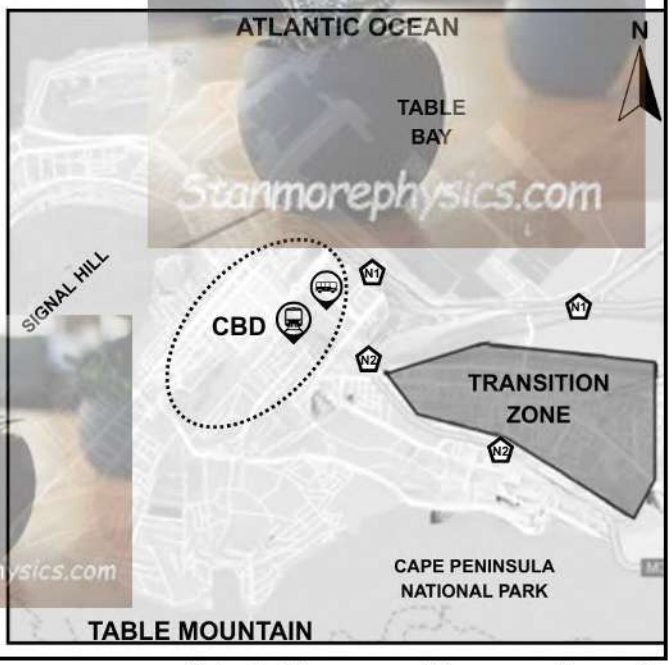
CAPE TOWN'S CENTRAL BUSINESS DISTRICT (CBD)

Cape Town's Central Business District (CBD) displays a well-defined morphological structure with a grid-iron street pattern and a high degree of accessibility. The expansion of the CBD into the transition zone is already underway. This growth reflects a natural outward extension of the CBD which is driven by space limitations in the urban core.

PHOTOGRAPH OF THE CBD







[Adapted from www.bizcommunity.com]

1.4.1 Identify TWO characteristics of the CBD from the photograph. (2 x 1) (2)

1.4.2 Provide evidence from the map to show the high accessibility of the CBD land-use zone. (2 x 1) (2)

1.4.3 How does the CBD's high degree of accessibility benefit commuters? (2 x 1) (2)

Refer to the transition zone.

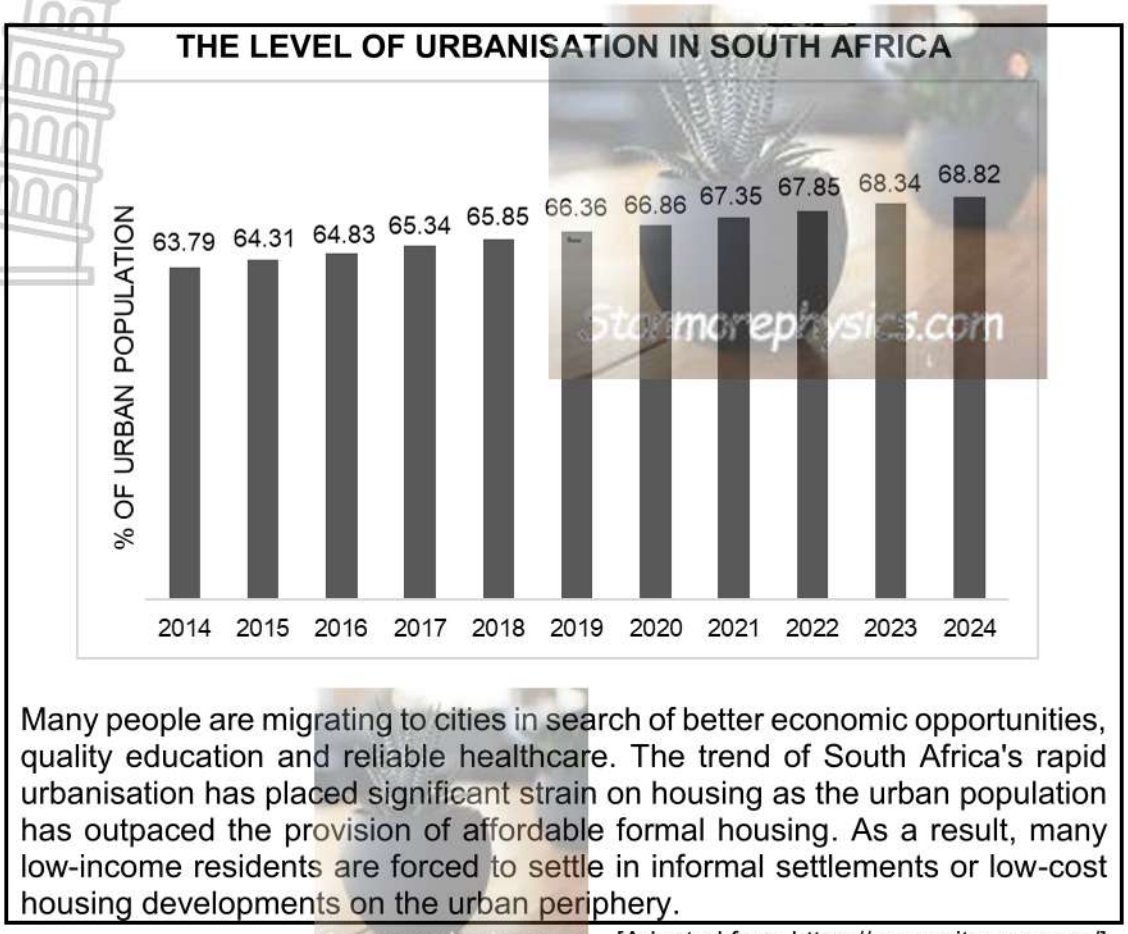
1.4.4 Why does the transition zone have an irregular shape? (1 x 1) (1)

1.4.5 Describe the social conditions that are characteristic of the transition zone. (1 x 2) (2)

1.4.6 Explain the positive economic impact that the CBD has on the transition zone. (3 x 2) (6)

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1.5 Refer to the graph and extract below on housing shortages related to rapid urbanisation.



Many people are migrating to cities in search of better economic opportunities, quality education and reliable healthcare. The trend of South Africa's rapid urbanisation has placed significant strain on housing as the urban population has outpaced the provision of affordable formal housing. As a result, many low-income residents are forced to settle in informal settlements or low-cost housing developments on the urban periphery.

[Adapted from https://www.witpress.com/]

1.5.1 What is *urbanisation?* (1 x 2) (2)

1.5.2 Provide evidence from the graph to show that the level of urbanisation in South Africa has increased. (1 x 1) (1)

1.5.3 From the extract, identify TWO social pull factors in the urban area. (2 x 1) (2)

1.5.4 What economic factors prevent municipalities from providing enough formal housing to its urban population? (2 x 2) (4)

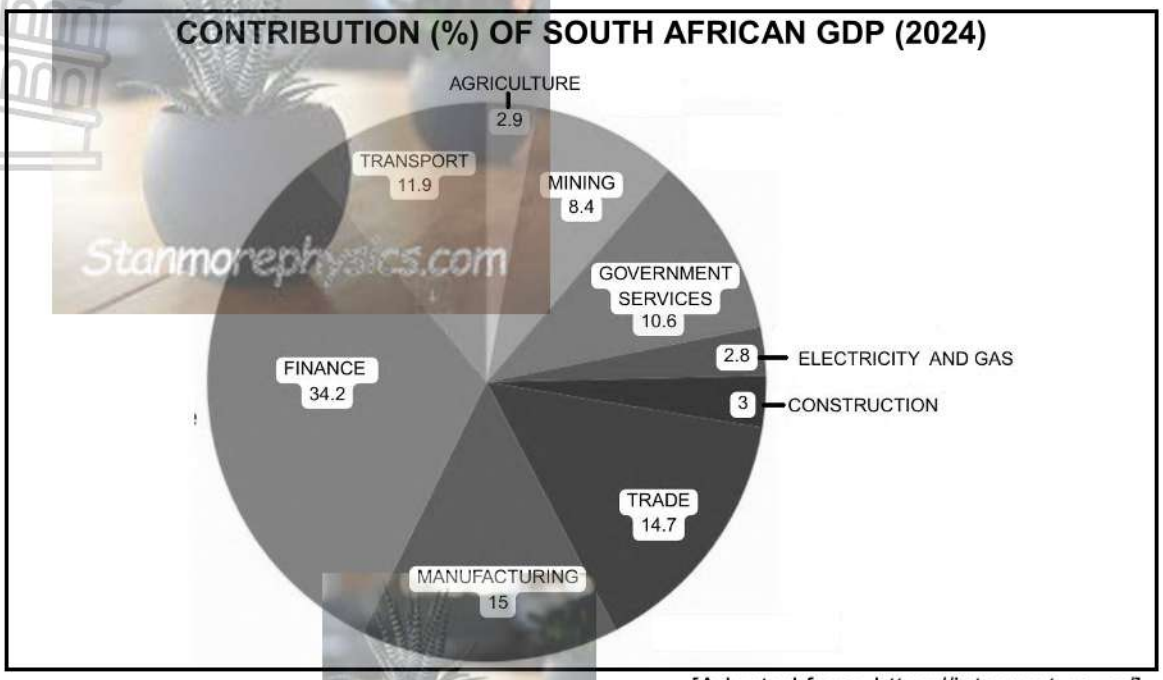
1.5.5 Explain the economic injustice for low-income residents residing on the urban periphery. (3 x 2) (6)

[60]

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QUESTION 2: ECONOMIC GEOGRAPHY OF SOUTH AFRICA

2.1 Refer to the graph below. Complete the statements in COLUMN A with the options in COLUMN B. Write only **Y** or **Z** next to question numbers (2.1.1 to 2.1.8) in the ANSWER BOOK, for example 2.1.9 Z.



[Adapted from: https://intergest.co.za/]

	COLUMN A	COLUMN B
2.1.1	The total value of all goods and services produced within a country in a given period	**Y** GDP **Z** GNP
2.1.2	Construction is an example of an activity in the … economic sector.	**Y** secondary **Z** tertiary
2.1.3	The primary economic sector contributed …% to the GDP.	**Y** 2.9 **Z** 11.3
2.1.4	The **…** sector is the most significant contributor to South Africa's economy in terms of GDP.	**Y** quaternary **Z** tertiary
2.1.5	The … of electricity and gas is a tertiary economic activity.	**Y** distribution **Z** production
2.1.6	The secondary economic activity that contributed the most to the GDP.	**Y** Finance **Z** Manufacturing
2.1.7	The primary activity that contributed the least to the country's GDP…	**Y** Agriculture **Z** Mining
2.1.8	Transport is part of the … economic sector.	**Y** tertiary **Z** quaternary

(8 x 1) (8)

2.2 Various options are provided as possible answers to the following questions on the types of industries. Choose the answer and write only the letter (A-D) next to the question numbers (2.2.1 to 2.2.7) in the ANSWER BOOK, e.g. 2.2.8 D.

2.2.1 An example of a light industry:

A Shipbuilding
B Car manufacturing
C Clothing production
D Steel smelting

2.2.2 The most important factor for the location of a market-oriented industry:

A Access to raw materials
B Availability of labour force
C Cheap land
D Proximity to consumer market

2.2.3 Ubiquitous industries are widely distributed because they…

A require a lot of open land.
B need bulk transport facilities.
C produce perishable goods.
D can locate anywhere.

2.2.4 A footloose industry is…

A reliant on internet and skilled labour.
B determined by access to its markets.
C influenced by its high energy needs.
D tied to a specific raw material source.

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Refer to the industries below to answer QUESTIONS 2.2.5 to 2.2.7.



[Adapted from https://www.investopedia.com]

2.2.5 Characteristics of industry **P**:

(i) Located on urban periphery
(ii) Associated with high levels of pollution
(iii) Requires low capital investment
(iv) Produces small consumer goods

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

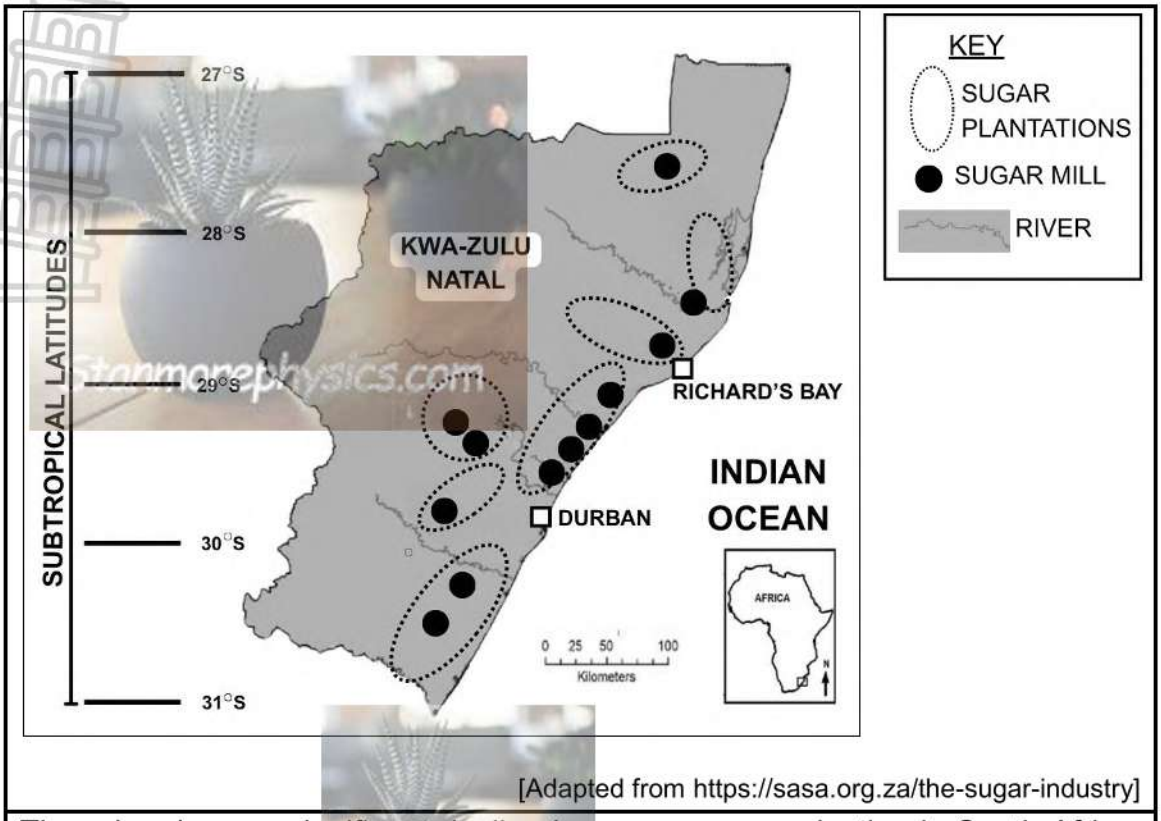
2.2.6 The … industry **(Q)** enables efficient transfer of goods from one mode of transport to another.

A break-of-bulk
B footloose
C ubiquitous
D market orientated

2.2.7 The raw material orientated industry **(R)** is strategically located to…

A transport products quickly to the market.
B reduce transport costs of bulky raw material.
C be accessible to distribution networks.
D reduce the cost of transporting finished goods. (7 x 1) (7)

2.3 Refer to the map and extract below based on South Africa's sugar-cane farming.



[Adapted from https://sasa.org.za/the-sugar-industry]

There has been a significant decline in sugar-cane production in South Africa. One of the most significant contributing factors of this downward trend has been the introduction of the Health Promotion Levy (commonly known as the sugar tax) which was implemented in 2018. The reduced domestic demand for sugar has seen sugar sales decline by 250,000 tons.

Studies estimate that approximately 16,000 jobs have been lost which includes over 9,700 among cane-growers alone. The levy poses a threat to the future viability of sugar-cane farming, particularly for small-scale farmers in rural KwaZulu-Natal, who represent the majority of South Africa's 22,000 sugar cane growers.

[Adaped from https://www.statista.com/production-of-sugar-from-sugar-cane]

2.3.1 From the map, identify TWO physical (natural) factors that promote sugar cane farming in KwaZulu-Natal. (2 x 1) (2)

2.3.2 According to the extract, what has caused the domestic demand for sugar to decline? (1 x 1) (1)

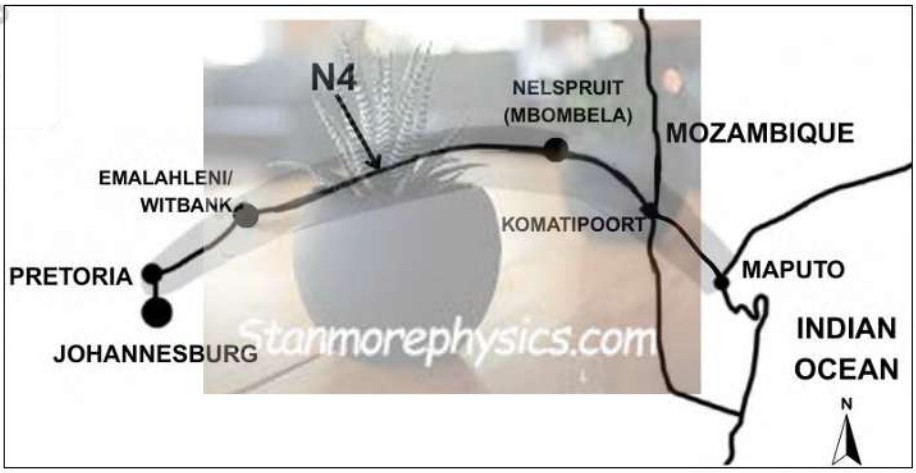
2.3.3 What is the negative economic impact of a reduced domestic demand of sugar on small-scale sugar-cane farmers? (2 x 2) (4)

2.3.4 Explain the economic importance of sugar cane farming to the South African economy. (4 x 2) (8)

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2.4 Refer to the map and extract below on The Maputo Corridor (SDI)

THE MAPUTO CORRIDOR (SDI)



The Maputo Corridor is widely recognised as one of the oldest and most successful Spatial Development Initiatives (SDIs) in southern Africa. The Maputo Corridor is the shortest and most efficient route (road and rail) connecting South Africa's core industrial region, the PWV, to the Indian Ocean through the Port of Maputo. With daily traffic averaging 1,600 heavy trucks and an annual volume of around 30 million tons, the corridor offers more cost-effective access to international markets, greatly benefiting key sectors such as mining and manufacturing.

Along this corridor, towns and cities like Nelspruit (Mbombela) and Komatipoort are experiencing economic growth driven by industrial decentralisation. Many businesses relocate manufacturing, logistics and agro-processing facilities to these centres to reduce costs and ease congestion in major urban areas.

[Adapted from www.freightnews.stagingcopy.co.za/]

2.4.1 Identify the neighbouring country that South Africa is linked to via the Maputo Corridor. (1 x 1) (1)

2.4.2 Name TWO types of transport infrastructure that connect South Africa to Maputo along the Maputo Corridor. (2 x 1) (2)

2.4.3 According to the extract, why is the Port of Maputo beneficial to the mining and manufacturing industries in the PWV? (2 x 1) (2)

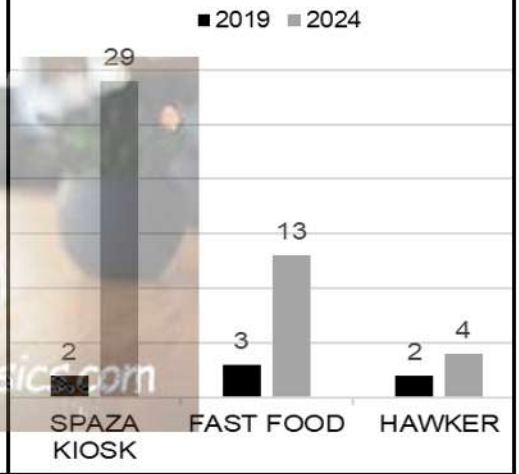
2.4.4 Explain why the Maputo Corridor would have a positive social impact in Nelspruit (Mbombela) and Komatipoort. (2 x 2) (4)

2.4.5 Explain the negative economic impact that international arrangements like the Maputo Corridor could have on the flow of South African goods destined for the export market. (3 x 2) (6)

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2.5 Refer to the infographic on the South African informal sector.





BANKING CARD MACHINES TRANSFORMING THE INFORMAL SECTOR

Informal businesses are increasingly adopting card machines and digital payments instead of relying only on cash. This shift enhances (improves) their safety by reducing the risk and cost associated with handling cash, such as theft and bank deposit fees. It also allows them to serve more customers, save money and build a record of sales. Overall, going cashless promotes financial inclusion and supports the integration of informal traders into the South African economy.

Adapted from https://techcentral.co.za/south-africa-informal-sector]

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

2.5.2 Provide evidence from the photograph that the informal trader has integrated banking technology into her business. (1 x 1) (1)

2.5.3 According to the graph, what type of informal trader has had the most significant increase in access to bank card machines? (1 x 1) (1)

2.5.4 Give a reason for your answer to QUESTION 2.5.3. (1 x 1) (1)

2.5.5 What are the social benefits for the consumers (customers) who make use of banking card facilities used by informal traders (answer to QUESTION 2.5.3)? (2 x 2) (4)

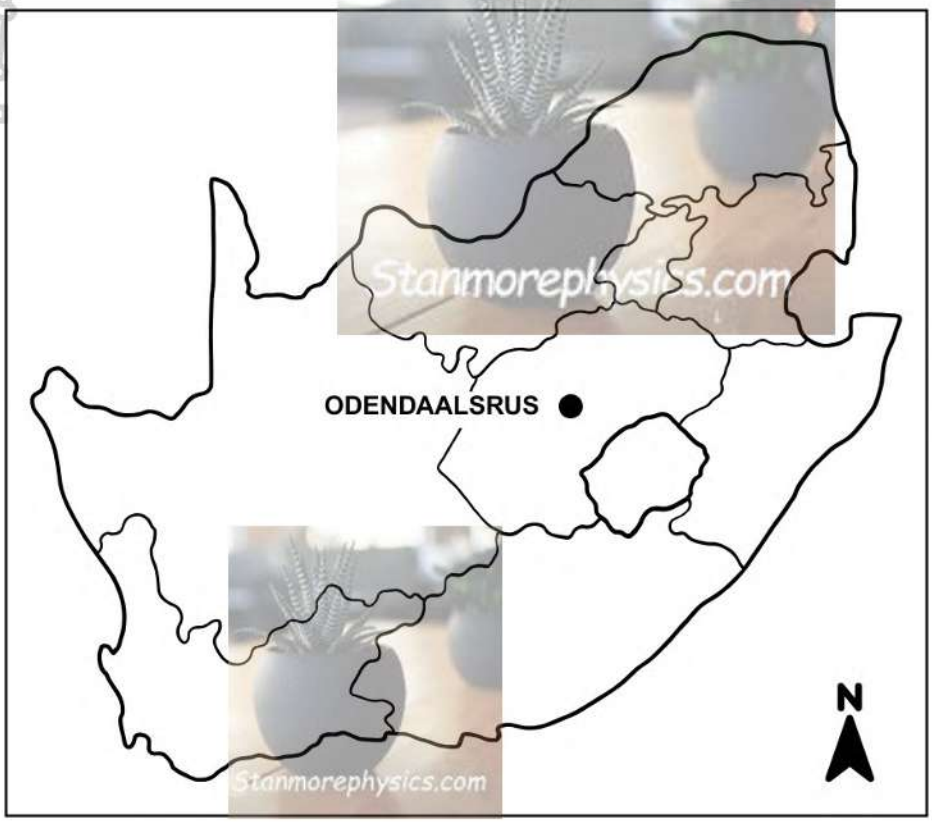
2..5.6 Explain how access to card machines assists informal businesses to become more economically secure. (3 x 2) (6)

[60]

SECTION B

QUESTION 3: GEOGRAPHICAL SKILLS AND TECHNIQUES

GENERAL INFORMATION ON ODENDAALSRUS



Coordinates: 27°52'S; 26°41'E

Odendaalsrus, located in South Africa's Free State province, was established in 1899 as a rural farming town. Its transformation began in 1946 with the discovery of gold turning it into a major mining hub. As part of one of the world's richest gold-producing regions, it played a key role in South Africa's mid-20th-century economic development. Although gold production has since declined, mining remains part of the local economy. The town is well-connected by major roads, including the R30 and R34, which link it to Welkom, Virginia and Kroonstad.

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

ENGLISH	**AFRIKAANS**
Slimes Dams	Slykdamme
Diggings	Uitgrawings

3.1 MAPWORK SKILLS AND CALCULATIONS

Refer to the topographical map and the orthophoto map. Four options are given for the questions below. Choose the correct answer and write only the letter (A–D) next to the question number (3.1.1 and 3.1.2) in the ANSWER BOOK e.g. 3.1.3 A.

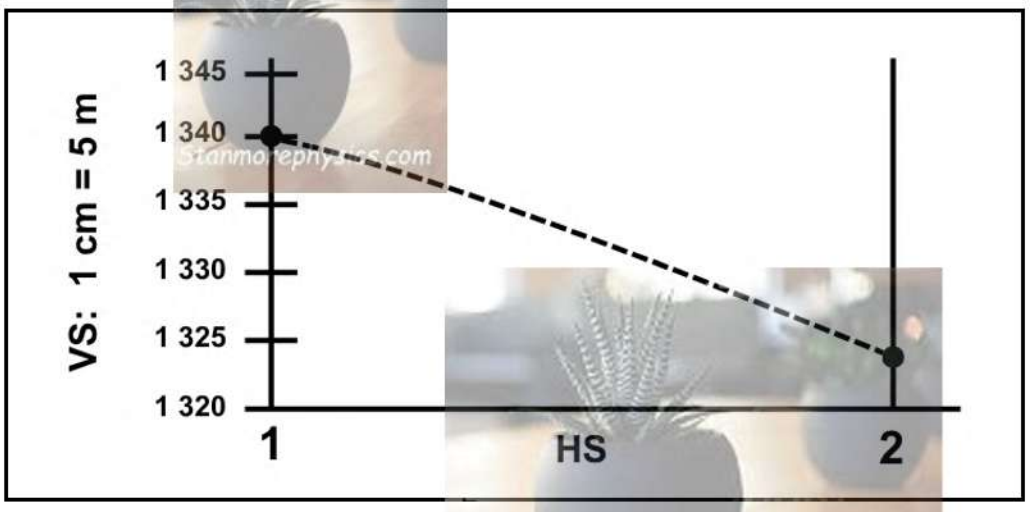
3.1.1 According to its function, Odendaalsrus is a … town.

A specialised
B gap
C junction
D transport (1 x 1) (1)

3.1.2 On the topographical map, in block **D1**, the … indicates the height (1336.9) in meters.

A spot height
B trigonometrical station
C contour line
D benchmark (1 x 1) (1)

3.1.3 Refer to the cross section from **1** to **2** on the orthophoto map.



(a) What is the ratio scale of the orthophoto map? (1 x 1) (1)

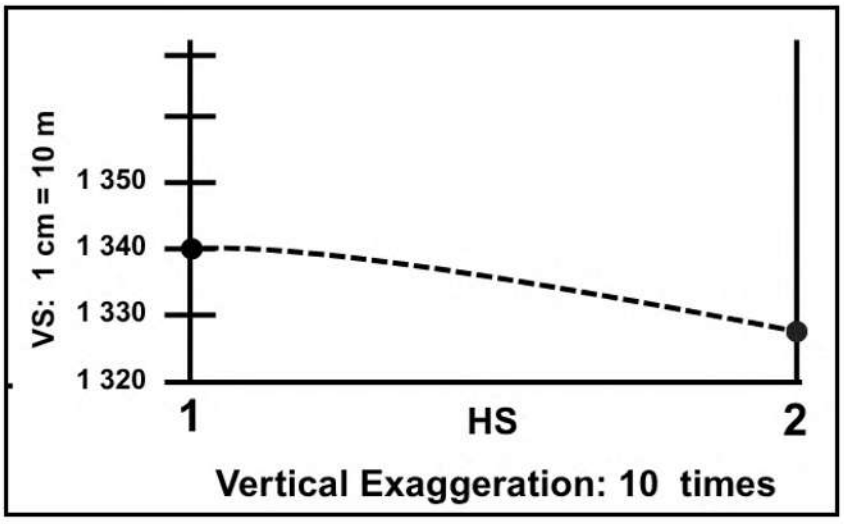
(b) Use your answer from QUESTION 3.1.3(a) to calculate the vertical exaggeration for the cross section.

Formula: $$\text{Vertical exaggeration} = \frac{\text{Vertical Scale (VS)}}{\text{Horizontal Scale (HS)}}$$

(3 x 1) (3)

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(c) Explain the effect of using a greater vertical exaggeration (answer to QUESTION 3.1.3(b)) compared to a lower one, as shown below. (1 x 2)



(2)

(d) The average gradient between **1** and **2** is 1 : 44. Explain why this is considered a gentle gradient. (1 x 2) (2)

3.2 MAP INTERPRETATION

3.2.1 Identify the dominant (main) street pattern of "Ou Dorp" (blocks **B2** and **B3**) in Odendaalsrus. (1 x 1) (1)

3.2.2 How did the topography of Odendaalsrus support the development of the street pattern (answer to QUESTION 3.2.1)? (1 x 1) (1)

Refer to the ANGLOGOLD mine in **A4/A5.**

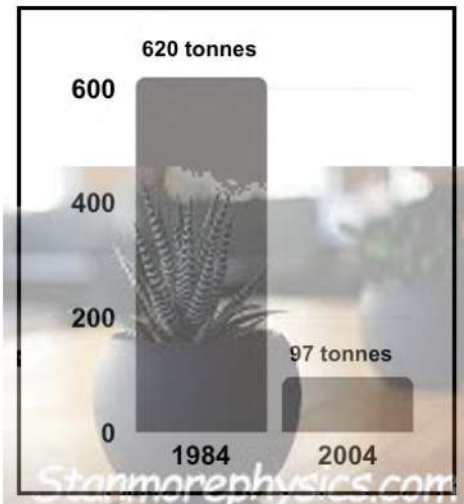
3.2.3 In which land-use zone is this mine located? (1 x 1) (1)

3.2.4 What environmental concerns caused by this mine can affect the residents in the land-use zone (answer to QUESTION 3.2.3)? (2 x 1) (2)

Refer to the FREESTATE GEDULD GOLD MINE in blocks **E2-E5.**

3.2.5 Identify transport infrastructure that has promoted (helped) the development of this mine. (2 x 1) (2)

3.2.6 Refer to the graph below which shows South Africa's gold production over time.



[Adapted from www.schiffgold.com/key-gold-news]

(a) How has South Africa's gold production changed over the 40-year period? (1 x 1) (1)

(b) How is the economy of Odendaalsrus negatively affected by the trend in gold production (answer to QUESTION 3.2.6(a))? (2 x 2) (4)

3.3 GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

Refer to the images below which show the Slime dams on the topographical map **(P)**.



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

3.3.1 The images were obtained using (data integration / remote sensing). (1 x 1) (1)

3.3.2 State whether the following data relating to **P** is spatial or attribute data:

(a) 27°55'S; 26°39'E (1 x 1) (1)

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(b) Capacity of 2.5 million m³ (1 x 1) (1)

3.3.3 Why is data standardisation necessary before using these TWO images in GIS? (1 x 2) (2)

3.3.4 Which process would be used to convert this raster data into vector format? (1 x 1) (1)

3.3.5 Refer to block **D1** on the topographical map and redraw the block in your answer book.

Indicate the following features which show that Odendaalsrus has seasonal but low rainfall that limits surface water availability.

(a) Human-made point feature (1)

(b) Polygon feature (1)

[30]

TOTAL: 150

