#### **GEOGRAPHY**

#### PAPER 2



#### **NOVEMVER 2017**

#### FIGURE 3.1: SETTLEMENT TYPES

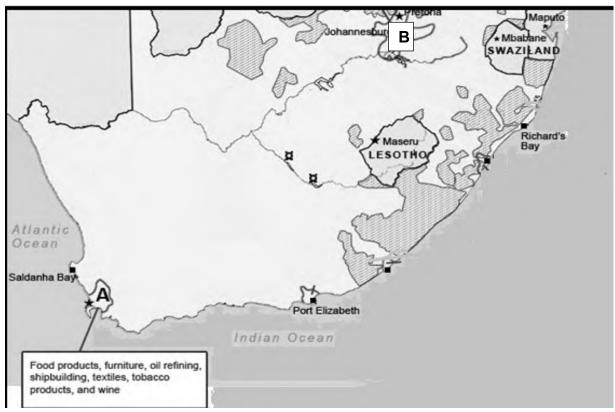


[Source: http://images.slideplayer.com/24/7567712/slides/slide 6.jpg]

- 3.1 Refer to FIGURE 3.1. Match the descriptions below with settlement **A** or **B**. Choose the answer and write only the letter A or B next to the question number (3.1.1–3.1.7) in the ANSWER BOOK, for example 3.1.8 A.
  - 3.1.1 Associated with dispersed farmsteads
  - 3.1.2 Allows for the sharing of farm equipment and ideas
  - 3.1.3 Have fragmented plots of land
  - 3.1.4 Needs large amounts of capital to be sustained
  - 3.1.5 Lack of privacy in this settlement type
  - 3.1.6 Shows a nucleated pattern
  - 3.1.7 Greater security risk in this settlement type

 $(7 \times 1) (7)$ 

FIGURE 3.2: CORE INDUSTRIAL REGIONS IN SOUTH AFRICA



[Source: www.keyword-suggestions.co]

- 3.2 Refer to FIGURE 3.2 based on two core industrial areas in South Africa.
  - 3.2.1 Name industrial area **A**.
  - 3.2.2 State ONE physical factor that industrial areas **A** and **B** have in common.
  - 3.2.3 Name industrial area **B**.
  - 3.2.4 Name the main agricultural product (crop) farmed in area **A**.
  - 3.2.5 Is industrial area **A** or **B** known for the processing of fruit?
  - 3.2.6 Will industrial area **A** or **B** be closer to the American markets?
  - 3.2.7 Does area **A** or **B** experience rainfall mainly in winter?
  - 3.2.8 Is area **A** or **B** the largest industrial area in South Africa?

 $(8 \times 1)$  (8)

#### **QUESTION 4**

#### 4.1: STREET PATTERNS



[Source: www.planetizen.com]

- 4.1 Refer to FIGURE 4.1 on street patterns. Match the descriptions below with street pattern **A** or **B**. Choose the answer and write only the letter A or B next to the question number (4.1.1–4.1.8) in the ANSWER BOOK, for example 4.1.9 A.
  - 4.1.1 Longer streets with fewer intersections
  - 4.1.2 Planned to facilitate a smooth flow of traffic
  - 4.1.3 A feature of new urban developments
  - 4.1.4 Makes building easier due to the regular shaped plots
  - 4.1.5 Not suitable for steep and hilly land
  - 4.1.6 Saves fuel and travelling time
  - 4.1.7 Easier to find places
  - 4.1.8 Associated with the oldest part of a settlement

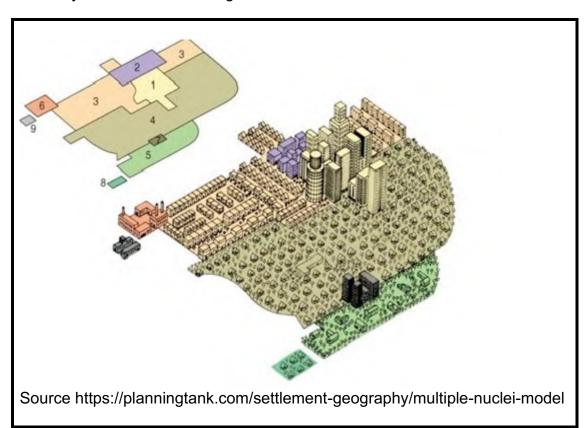
 $(8 \times 1) (8)$ 

4.2 Choose a term in COLUMN B that matches the description in COLUMN A. Write only the letter (A–H) next to the question number (4.2.1–4.2.7) in the ANSWER BOOK, for example 4.2.8 J.

	COLUMN A		COLUMN B
4.2.1	Associated with scientific methods of farming	А	urban agriculture
4.0.0	- · · · ·	В	labour intensive
4.2.2	Type of farming where every available piece of land is cultivated	С	large-scale farming
4.2.3	Crops grown in residential areas	D	monoculture
4.2.4	Farms that depend heavily on manual labour	Е	intensive farming
4.0.5		F	export market
4.2.5	Products manufactured for sale to other countries	G	home market
4.2.6	Products sold within South Africa	Н	import market
4.2.7	Farming that grows one product (crop)		

 $(7 \times 1) (7)$ 

3.3. Study FIGURE 3.3 showing urban land-use.



 $(1 \times 2) (2)$ 3.3.1 Define the term urban land-use.  $(1 \times 1) (1)$ 3.3.2 Name land-use zone 1. 3.3.3 What evidence indicates that land-use zone 1 has a high (1x 2) (2)degree of accessibility? 3.3.4 Discuss TWO problems that land-use zone 1 experiences due  $(2 \times 2) (4)$ to its high accessibility 3.3.5 In a paragraph of approximately EIGHT lines, analyse the role that green belts play in reducing the environmental problems that land-use zone 1 experiences as a result of its

accessibility.

 $(2 \times 4) (8)$ 

3.4 Refer to FIGURE 3.4, an extract based on urban blight, which is an urban issue related to rapid urbanisation.

## URBAN RENEWAL PROGRAMME TO FIGHT URBAN BLIGHT ANGERS WOODSTOCK RESIDENTS

The deadline for Bromwell Street residents in Woodstock, Cape Town, to leave their homes has been extended. One of the residents says urban renewal programmes are destroying their lives in Woodstock and Salt River.

The Woodstock Hub gained possession of 120–128 Bromwell Street in 2013 to upgrade the buildings. The director of the Woodstock Hub says these properties were supposed to be vacated. Three years later the residents say they have nowhere to go, and blame the urban renewal project and the government for their predicament.

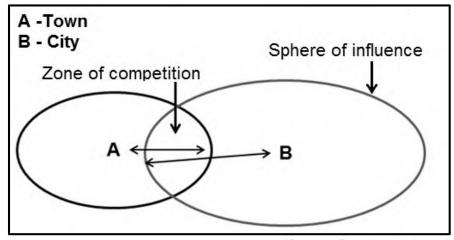
Western Cape MEC of Human Settlements says he has offered the families housing in Delft, but they didn't want to take it. The residents say they don't want to be forced to move so far out of the city into a community that they are not familiar with.

[Adapted from http://www2.mcdaniel.edu/Biology/ESP/cities/urbanquestions.html

3.4.1	What do you understand by the term urban blight?	(1x 2)(2)
3.4.2	State ONE cause of urban blight	(1x1)(1)
3.4.3	Why have the inhabitants of 120–128 Bromwell Street not vacated (left) their homes yet?	(1x 2) (2)
3.4.4	Why do residents feel that urban renewal of the Woodstock Hub is destroying their lives?	(1x 2) (2)
3.4.5	Give TWO reasons why the transition zone requires urban renewal.	(2 x 2) (4)
3.4.6	Explain why urban renewal will change 120-128 Bromwell	(2 x 2) (4)
	Street from a low- to a middle- or a high-income residential	
	area	

4.3 Refer to FIGURE 4.3 based on high- and low-order urban centres and their spheres of influence.

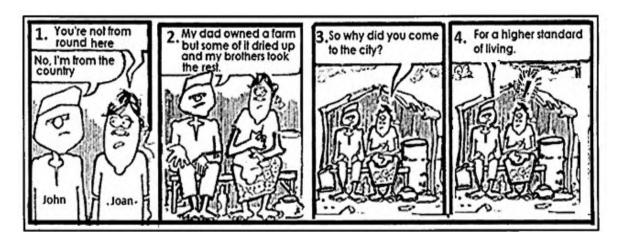
#### SPHERE OF INFLUENCE



[Source: Examiner's sketch]

- 4.3.1 Define the term *sphere of influence*. (1x2) (2)
- 4.3.2 Compare the size of the city's sphere of influence with that (1x1) (1) of the town.
- 4.3.3 What determines the size of the sphere of influence of an (1 x 1) urban settlement?
- 4.3.4 Give TWO possible reasons for the overlap of the town's (2x2) (4) sphere of influence with that of the city.
- 4.3.5 Explain why the range (distance) of different goods and  $(2 \times 2)(4)$  service offered in city **B** is not the same.
- 4.3.6 According to the urban hierarchy of settlements, why are (2 x 2) (4) there more low-order centres (towns) than high-order centres (cities)?

#### 4.4 Study FIGURE 4.4 showing a cartoon strip on rural-urban migration.



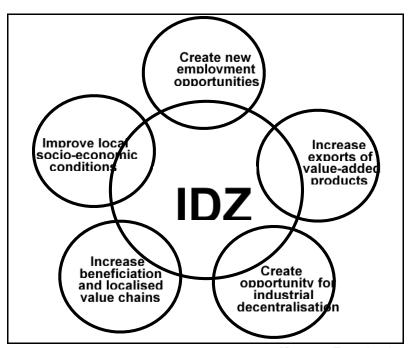
[Adapted from OCR 2014]

- 4.4.1 Name the push factor in the cartoon that caused (1x 1) (1) rural-urban migration.
- 4.4.2 Name the pull factor that attracted John to the city. (1 x 1) (1)
- 4.4.3 Refer to the cartoon (frame 4). Why was Joan (1 x 1) (1) surprised by John's attraction to the city
- 4.4.4 Local government (municipalities) must increase (4 x 2) (8) their yearly budgets to provide for an influx of rural migrants. Explain this statement in a paragraph of approximately EIGHT lines.

3.5 Refer to FIGURE 3.5 based on industrial development zones (IDZ), which create opportunities for industrial decentralisation.

FIGURE 3.5: INDUSTRIAL DEVELOPMENT ZONES

conditions



[Source: Examiner's notes]

3.5.1.	Give an example of an IDZ in South Africa.	(1 x 1) (1)
3.5.2.	What is the main aim of an IDZ?	(1 x 1) (1)
3.5.3.	How does an IDZ create the opportunity for industrial decentralisation?	(2 x 2) (4)
3.5.4.	State TWO advantages of industrial decentralisation for the	(2 x 2) (4)
	core industrial regions in South Africa.	
3.5.5.	Explain how an IDZ will improve local socio-economic	(2 x 2) (4)

3.6 FIGURE 3.6 is a table showing South Africa's position on the global food security index

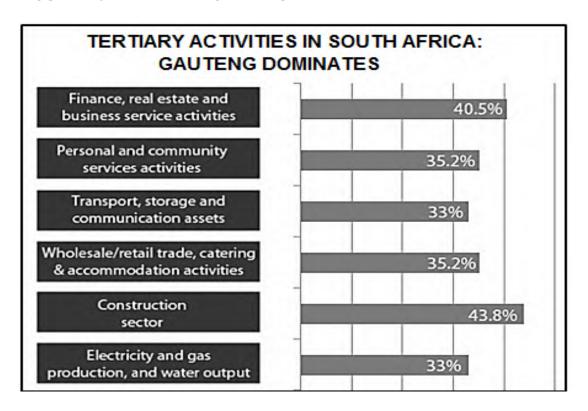
FIGURE 3.6: SOUTH AFRICA'S POSITION ON THE GLOBAL FOOD SECURITY INDEX 2012–2016

RANKING OF SOUTH AFRICA IN 2016 COMPARED TO 2012						
COUNTRY	GLOBAL FOOD SECURITY INDEX				CDD LIST 2046	
COUNTRY	2012 Score	2012 Ranking	2016 Score	2016 Ranking	GDP US\$ 2016	
South Africa	61,7	40	62,9	47	13 481	

- 3.6.1. Describe the change in South Africa's food security index (1 x 1) (1) score from 2012 to 2016.
- 3.6.2. State the change in South Africa's world ranking in terms (1 x1) (1) of the food security index from 2012 to 2016.
- 3.6.3. When is a country considered to be food secure? (1 x 2) (2)
- 3.6.4. Explain the positive impact of having food security in (2 x 2) (4) South Africa
- 3.6.4. Write a paragraph of approximately EIGHT lines in which (4 x 2) (8) you analyse the reasons for South Africa's low food security index.

4.6. Study FIGURE 4.6 showing the percentage of Gauteng's activities in the tertiary sector in South Africa.

**FIGURE 4.6: TERTIARY ACTIVITIES** 



4.6.1.	Define the term tertiary economic activities.	(1 x 2) (2)
4.6.2.	Which tertiary activity in Gauteng contributes the most to South Africa's economy?	(1 x 1) (1)
4.6.3.	Give a reason for the economic activity that contributes the	(1 x 2) (2)
	highest percentage to the tertiary sector.	
4.6.4.	Comment on the contribution of the tertiary sector of Gauteng to the economy of South Africa, based on the information in FIGURE 4.6.	(1 x 2) (2)
4.6.5.	Why is it preferable for a country to have a stronger tertiary	(2 x 2) (4)
	sector than a primary sector?	
4.6.6.	Explain the role that transport plays in strengthening the tertiary sector in Gauteng.	(2 x 2) (4)

#### **NOVEMBER 2018**

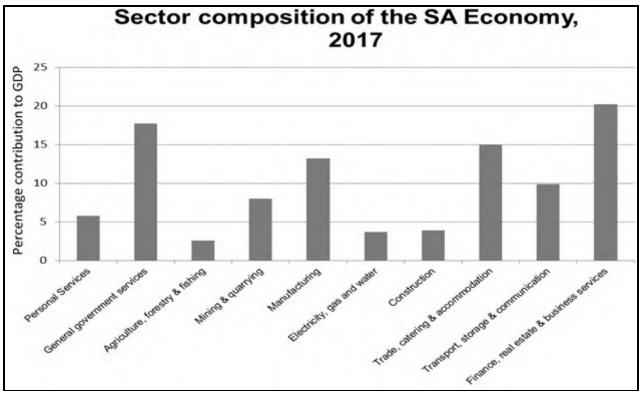
#### **QUESTION 3**

3.1 Choose ONE word/term from the list below that matches a description of settlement patterns or shapes. Write only the word/term next to the question numbers (3.1.1 to 3.1.8) in the ANSWER BOOK.

linear;	T-shaped;	cross-shaped;	dispersed;	cobweb;	circular;	stellar;	
semi-ci	rcular; nuc	leated					

- 3.1.1 Shape of settlements located along a narrow canal .
- 3.1.2 Settlement shape that develops along many main roads which radiate in different directions from a central point
- 3.1.3 Shape of settlement located along a harbour
- 3.1.4 Settlement shape that resulted from houses that are grouped around a market square.
- 3.1.5 Settlement pattern that resulted from houses being close together
- 3.1.6 Settlement shape where two major roads intersect
- 3.1.7 Settlement pattern that resulted when houses are far apart from each other.
- 3.1.8 Settlement shape where a secondary road meets with a main road (8 x 1)

3.2 Refer to FIGURE 3.2 depicting the sector composition of the South African economy in 2017.



[Examiner's bar graph, Statistics from STATS SA, 2017]

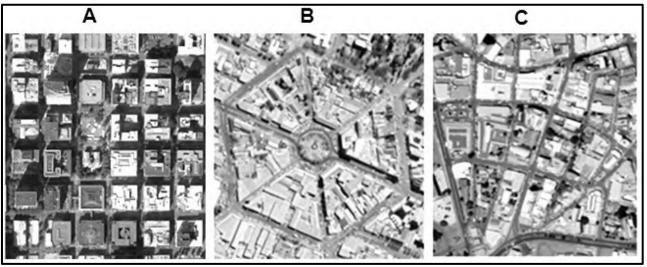
- 3.2 Various options are provided as possible answers to the following questions. Choose the answer and write only the letter (A–D) next to the question numbers (3.2.1 to 3.2.7) in the ANSWER BOOK, e.g. 3.2.8 A.
  - 3.2.1 The total value of goods and services produced in a country in one year:
    - A GNP
    - B GDP
    - C GPP
    - D RDP

- 3.2.2 Which tertiary activity contributed the most to the South African economy?
  - A General government services
  - B Manufacturing
  - C Trade, catering and accommodation

# Downloaded from Stanmorephysics.com D Finance, real estate and business services

		ט	rinance, real estate and business services	
	3.2.3 fo	orm(s) p	part of the tertiary sector of the economy.	
		A B C D	Agriculture, forestry and fishing Electricity, gas and water Mining and quarrying Manufacturing	
3.2.4	Name the c	ategory	that contributed the least to the primary sector in	2017:
		A B C D	Mining and quarrying Construction Transport, storage and communication Agriculture, forestry, fishing	
3.2.5	This catego	ory dom	inated the secondary sector in 2017:	
		A. B. C. D.	General government services Manufacturing Trade, catering and accommodation Finance, real estate and business services	
3.2.6	Which tertia	ry activ	ity contributed the least to the South African econor	ny in 2017?
		A B C D	Personal services General government services Electricity, gas and water Transport, storage and communication	
3.2.7	What perce 2017?	ntage d	id the tertiary sector contribute to the South African	economy in
		A B C D	10% 25% 77% 91%	(7 x 1) (7)

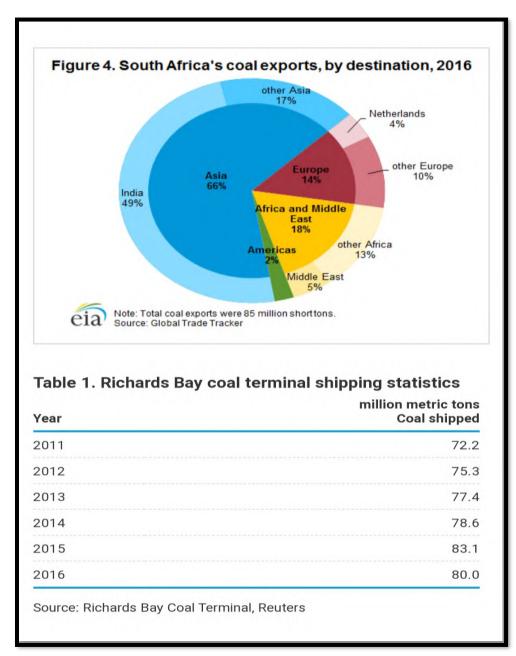
#### **FIGURE 4.1: STREET PATTERNS**



[Adapted from Google Earth]

- 4.1 Refer to FIGURE 4.1 on different street patterns. Match the descriptions below with street patterns **A**, **B** or **C**. Choose the answer and write only the letter A, B or C next to the question numbers (4.1.1 to 4.1.7) in the ANSWER BOOK, e.g. 4.1.8 A. You may choose the same letter more than once.
  - 4.1.1 Commonly found in the oldest parts of South African cities
  - 4.1.2 Transport routes radiate from a central point
  - 4.1.3 Streets intersect at right angles and planning is made easy
  - 4.1.4 Associated with ancient cities with ring roads as a feature
  - 4.1.5 Associated with new urban developments
  - 4.1.6 Can result in traffic congestion
  - 4.1.7 Suburbs with this street pattern will have irregular roads for the smooth flow of traffic (7 x 1) (7)

FIGURE 4.2: SOUTH AFRICA'S COAL EXPORTS BETWEEN 2011 TO 2016

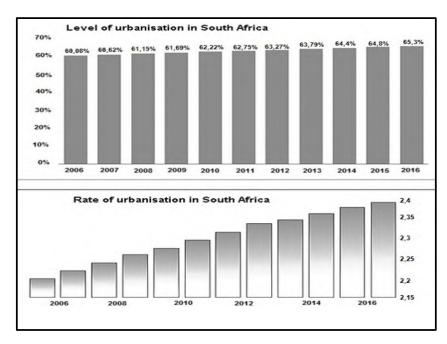


Adapted from [https://www.eia.gov/international/content/analysis/countries\_long/south\_africa/images/coal\_exports.png]

- 4.2 Refer to FIGURE 4.2 showing South Africa's coal exports between 2011 to 2016.
- 4.2.1 Name the South Africa's mineral that is exported through Richards Bay harbour.
- 4.2.2 Which country that demands more coal from South Africa?
- 4.2.3 Give the total percentage of coal shipped (in million metric tons) for 2015.

- 4.2.4 Name the country that demands less coal from South Africa.
- 4.2.5 (Mpumalanga/Gauteng) is the province that produces more coal in South Africa.
- 4.2.6 The cheapest mining method for coal extraction is (open cast/shaft) mining.
- 4.2.7 The trend for coal terminal shipping from 2011 to 2015 is (decreasing/increasing).
- 4.2.8 Calculate the difference for coal terminal shipping between 2011 and 2015. (8 x 1) (8)

3.3 FIGURE 3.3 shows bar graphs indicating the level and rate of urbanisation in South Africa between 2006 and 2016

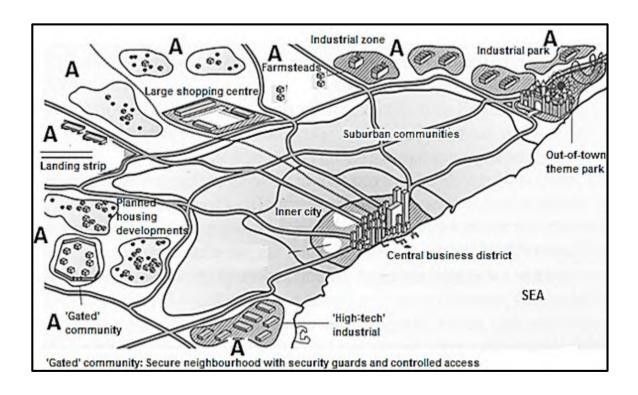


[Source: https://www.statista/com/statistics/455931/urbanization-south-africa/and https://tradingeconomics.com/south-africa/urban-population-growth-annual-percent-wb-data.htm

3.3.1	Define the term urbanisation.	(1x2) (2)	
3.3.2	State the relationship between the level and the rate of urbanisation between 2006 and 2016.	(1x2) (2)	
3.3.3	Discuss TWO physical factors in the rural area that could have contributed to the rate of urbanisation shown in FIGURE 3.3.	(2x2) (4)	
3.3.4	Write a paragraph of approximately EIGHT lines discussing	(4 x 2)	(8)

the reasons why the rate and level of urbanisation has led to increased protests against service delivery in urban areas

#### 3.4 FIGURE 3.4 shows the rural-urban fringe marked as **A**.



3.4.1	What is the rural-urban fringe?	(1x2)	(2)
3.4.2	State TWO urban land uses that are evident in the rural-urban fringe (A).	(2x1)	(2)
3.4.3	Give TWO reasons why the rural-urban fringe is		
	becoming more urban in nature	(2x2)	(4)
3.4.4	Why is the rural-urban fringe an attractive location for the gated community (secure neighborhood with security guards and controlled access)?	(2x2)	(4)
3.4.5	The demand for housing is growing rapidly and developers are looking at the rural-urban fringe as a solution for the shortage of building space. Suggest TWO possible objections to planned housing developments in the rural-urban fringe.	(2x2)	(4)

4.3 Read the extract in FIGURE 4.3 referring to poor public transport as an economic injustice in South Africa.

#### WHAT WILL IT TAKE TO DISRUPT SOUTH AFRICA'S PUBLIC TAXI INDUSTRY?

By Lebogang Tsele, 24 May 2017

The South African public taxi industry is reported to serve 15 million commuters per day. The multi-billion rand minibus taxi industry is still largely unregulated and has challenges, such as unlicensed vehicles, violence and the safety of commuters.

Government has taken drastic measures to curb a number of killings involving two minibus taxi associations in Ladysmith. The MEC for Transport, Community Safety and Liaison, Mxolisi Kaunda, announced that he would be shutting down both the Sizwe transport and Klipriver taxi associations. He described them as conflict ridden and said the department had to use extraordinary means to restore calm, peace and stability.

There are a lot of new businesses, such as Uber and Taxify, and this is causing a lot of discomfort in the industry. However, this would be a much needed change in the industry.

[Adapted from <a href="https://www.smesouthafrica.co.za/17264/Tech-To-Disrupt-Taxi-Industry/">https://www.smesouthafrica.co.za/17264/Tech-To-Disrupt-Taxi-Industry/</a> and Kaveel Singh in *eNCA*]

4.3.1	Name the type of public transport system highlighted in the		
	extract.	(1x1)	(1)
4.3.2	Give ONE reason why the poor public transport system named in QUESTION 4.3.1 is considered to be an economic injustice	(1x1)	(1)
4.3.3	What drastic measure has government taken to solve the taxi		
	crisis?	(1x1)	(1)
4.3.4	Why does the taxi industry transport 15 million commuters		
	daily?	(2x2)	(4)
4.3.5	Why are taxi drivers against new taxi businesses such as		
	Uber and Taxify?	(2x2)	(4)
4.3.6	Discuss TWO possible solutions that government could		
	implement to reduce taxi violence	(2x2)	(4)

4.4 FIGURE 4.4 shows water as a social justice issue in rural areas.



[Source: https://www.youtube.com/watch?v=DnIZOsH7ezU

4.4.1	How was water	transported in rural areas prior to the		
	invention of the	water wheel shown in FIGURE 4.4?	(1x1)	(1)

- 4.4.2 How has the water wheel by Wello changed access to water in rural areas? (1 x 2) (2)
- 4.4.3 What role can access to water in rural areas play in reducing poverty? (1 x 2) (2)
- 4.4.4 Give a reason for the poor water infrastructure in rural areas of South Africa. (1 x 2) (2)
- 4.4.5 Write a paragraph of approximately EIGHT lines suggesting sustainable solutions to improve access to water in rural areas. (4 x 2) (8)

3.5 Refer to FIGURE 3.5, an extract on South Africa's beef industry.

#### FIGURE 3.5: BEEF FARMING

#### 2020 AND BEYOND: A VISION FOR THE SOUTH AFRICAN BEEF INDUSTRY

By Lloyd Phillips, 7 December 2017

In 2016 South Africa became a net red meat exporter for the first time, supplying mainly the cheap beef market.

In 2016 global red meat exports amounted to 9,44 million tons. Brazil led the way, exporting 1,85 million tons or 19,6% of the total. South Africa ranked 15<sup>th</sup> at 60 000 tons, or 0,64%, of the world total.

The recent drought showed how crucial it was for the country's beef industry to stop focusing on exporting only cheap beef. By exporting higher quality beef, our industry can protect itself from shocks that result in reduced profits.

It must be noted, however, that with the current high beef price in South Africa, the country will be unable to compete against the likes of Brazil and other top beef exporters.

[Adapted from <a href="https://www.farmersweekly.co.za/agri-business/agribusinesses/">https://www.farmersweekly.co.za/agri-business/agribusinesses/</a> <a href="https://www.farmersweekly.co.za/agri-business/agribusinesses/">2020-</a> <a href="https://www.farmersweekly.co.za/agribusiness/agribusinesses/">2020-</a> <a href="https://www.farmersweekly.co.za/agribusinesses/">2020-</a> <

- 3.5.1. Which country had the highest exportation of beef in 2016 (1 x 1) (1)
- 3.5.2. Quote evidence from the extract that suggests that the beef (1 x 1) (1) industry is growing in South Africa.
- 3.5.3. Refer to the statement below.
  - a) Why does the exportation of low-quality beef reduce (1 x 1) (1) profits
  - b) Suggest how farmers can produce higher quality beef. (2 x 2) (4)
- 3.5.4. Write a paragraph of approximately EIGHT lines explaining the (4 x 2) (8) factors preventing South Africa from being competitive with other top beef exporters.

4.5 Read the extract in FIGURE 4.5 based on the PWV/Gauteng Industrial Region.

#### FIGURE 4.5: PWV/GAUTENG INDUSTRIAL REGION

#### **GAUTENG TO REMAIN DOMINANT IN SA ECONOMY UNTIL 2017**

By Leandi Kolver

Gauteng continued to dominate the South African economy, contributing nearly 35% to the national gross domestic product, until at least 2017. It is noted that Gauteng's provincial economy was 75% and was made up of tertiary sector industries, including trade, transport, finance and community services. The province was also regarded as the natural destination for international investors wishing to establish a springboard into Africa.

The PWV/Gauteng Industrial Region's diversified manufacturing sector produced more than 50% of South Africa's manufactured exports. The PWV/Gauteng Industrial Region has a number of copper-processing industries, which is supported by raw materials from the Phalaborwa SDI. The diversified manufacturing sector, including copper, will face major challenges in the next three years, including challenges related to energy provision, labour, underinvestment in capital equipment and technology.

[Adapted from http://www.engineeringnews.co.za/article/gauteng-to-remain-dominant-saeconomy-until-

2017-2014-05-14/rep id:4136]

- 4.5.1. Quote evidence from the article to support the statement that the PWV/Gauteng Industrial Region is a core industrial region. (1 x 1) (1)
- 4.5.2. Discuss ONE factor that has contributed to the PWV/Gauteng Industrial Region being a preferred destination for international investors. (1 x 2)
- 4.5.3. Gauteng's manufacturing sector is a major market for copper.
  - a) Why is the Phalaborwa SDI the main supplier of copper (1 x 2) (2) to Gauteng?
  - b) How will the Phalaborwa SDI benefit from strengthening its trading links with Gauteng? (1 x 2) (2)

Refer to the cartoon in FIGURE 4.6 showing the role of international trade in 4.6. the South African economy.

# FIGURE 4.6: ROLE OF INTERNATIONAL TRADE IN ECONOMIC DEVELOPMENT



- 4.6.1. What is international trade? (1 x 2) (2)
- 4.6.2. Name the product that is being imported into South Africa in (1 x 1) (1) large quantities.
- 4.6.3. Which government department is represented as the referee in the cartoon? (1 x 1) (1)
- 4.6.4. Explain why the cartoon suggests that the fight cannot be nice, (1 x 2) (2) clean and fair.
- 4.6.5. Name ONE way in which cheap imports negatively impact on (1 x 2) (2) the GDP of South Africa.

#### **NOVEMBER 2019**

#### **QUESTION 3**

3.1 Choose a term from COLUMN B that matches the description in COLUMN A. Write only the letter (A–I) next to the question numbers (3.1.1 to 3.1.8) in the ANSWER BOOK, e.g. 3.1.9 J.

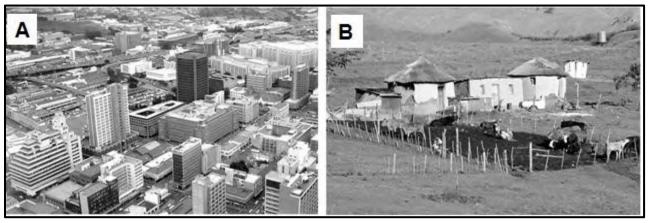
	COLUMN A		COLUMN B
3.1.1	Ranking of urban settlements from smallest to largest	A	sphere of influence
		В	high-order goods
3.1.2	Settlement that provides goods and services to the surrounding rural population	С	urban hierarchy
		D	low-order goods
3.1.3	Area from where urban settlements draw their customers	E	central place
3.1.4	Minimum number of customers	F	low-order centres
	needed to make a business profitable	G	high-order centres
3.1.5	The maximum distance that people travel to buy goods and services	Н	threshold population
		I	range
3.1.6	Type of goods that are purchased frequently		
3.1.7	Few services and functions are available		
3.1.8	Goods and services that are not purchased regularly		(0 4) (0

(8 x 1) (8)

- 3.2 Match the statements below with the primary, secondary or tertiary economic sectors. Write only the sector next to the question numbers (3.2.1 to 3.2.7) in the ANSWER BOOK.
  - 3.2.1 Mining is an example of this economic sector
  - 3.2.2 This sector is concerned with the provision of services
  - 3.2.3 The extraction of raw materials from the Earth's surface
  - 3.2.4 Concerned with the processing of raw materials

- 3.2.5 The provision of electricity is an example of this sector
- 3.2.6 The manufacture of textiles, footwear and clothing
- 3.2.7 Contributes the least to the GDP of South Africa (7 x 1) (7)

#### QUESTION 4: RURAL AND URBAN SETTLEMENTS



[Source: <a href="https://www.google.co.za/search?q=rural+settlements+in+south+africa&tbm=isch&tbs">https://www.google.co.za/search?tbm=isch&q=urban+settlements+in+south+africa&chips</a>]

- 4.1 Refer to FIGURE 4.1 showing rural and urban settlements. Match the statements below to settlement type (**A** or **B**). Write only the letter next to the question numbers (4.1.1 to 4.1.7) in the ANSWER BOOK.
  - 4.1.1 Settlement associated with secondary and tertiary activities
  - 4.1.2 Primary activities dominate in this settlement
  - 4.1.3 Known as a unifunctional settlement
  - 4.1.4 This settlement offers multiple functions
  - 4.1.5 The pattern of this settlement is always nucleated
  - 4.1.6 An example of such a settlement is a city
  - 4.1.7 The smallest settlement is called a farmstead (7 x 1)(7)

4.2 Choose a term in COLUMN B that matches the description in COLUMN A. Write only the letter (A–I) next to the question numbers (4.2.1 to 4.2.8) in the ANSWER BOOK, e.g. 4.2.9 J.

	COLUMN A		COLUMN B
4.2.1	Exchange of goods and services between countries	Α	transportation network
		В	formal
4.2.2	Income generated by a country by means of exports	С	home market
4.2.3	Facilitates the movement of people, goods and information	D	trade
	from one place to another	E	beneficiation
4.2.4	Refers to goods that are brought into the country	F	GDP
	into the country	G	foreign exchange
4.2.5	Legally registered businesses	H	GNP
4.2.6	Also known as the domestic	ľ	ON
	market	l	imports
4.2.7	Total value of goods and services produced by a country per year		
4.2.8	Value added to a raw material by means of processing		(0.4) (0

(8 x 1) (8)

3.3 Read the extract from the State of the Nation Address (SONA) in FIGURE 3.3 about rural settlement issues: land reform.

#### STATE-OWNED 'LAND PARCELS' IDENTIFIED FOR EXPROPRIATION - RAMAPHOSA

President Cyril Ramaphosa says state-owned 'land parcels' have been identified for the purpose of \*expropriation without compensation. Ramaphosa delivered his 2019 State of the Nation Address (SONA) in February 2019. An advisory panel of experts was put in place to advise government on its land reform programme. 'As part of accelerating land reform, we have identified land parcels owned by the state for redistribution,' President Ramaphosa stated.

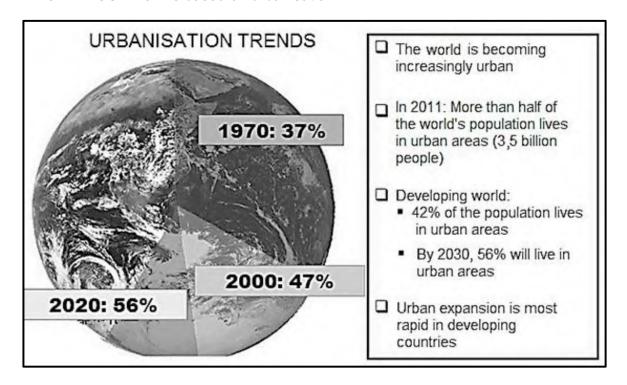
With regard to an agriculture stimulatory package, Ramaphosa said government had invested a lot in comprehensive farmer development support to ensure that restituted and communal land was productively used. Government would continue to give importance to targeted skills development and capacity building programmes for emerging farmers.

\*Expropriation: the act of a government in taking privately owned property, seemingly to be used for purposes designed to benefit the overall public

 $[Adapted\ extract\ of\ SONA\ from\ \underline{https://www.news24.com/SouthAfrica/News/state-owned-land-parcels-identified-for-expropriation-ramaphosa-20190207]$ 

3.3.1	What is land reform?	(1 x 2) (2)
3.3.2	Refer to land reform policy.	
	(a) Name TWO land reform programs referred to in the extract.	(2 x 1) (2)
	(b) Explain the difference between the land reform	
	programmes named in QUESTION 3.3.2(a).	$(2 \times 2) (4)$
3.3.3	Give TWO solutions in the extract that refers to the success of land reform for emerging farmers.	(2 x 1) (2)
3.3.4	How will the action of 'expropriation of land without compensation' help accelerate (speed up) the process of land reform?	
	and roloini:	(1 x 2) (2)
3.3.5	Discuss how the implementation of land reform can affect	
	South Africa's agricultural production.	(2x 2) (4)

3.4 FIGURE 3.4 is based on urbanisation



[Source: https://www.google.co.za/search?q=urban+expansion+south+africa&tbm=isch&tbs=rimg:CeZI]

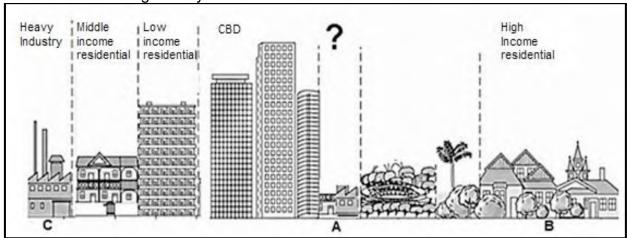
3.4.1 Distinguish between the terms <i>urbanisation</i> and <i>urban expansion</i> . (2 x	x 2) (	(4)
---	--------	-----

3.4.3 Why does urbanisation give rise to urban expansion? (2 x 2) (4)

3.4.4 In a paragraph of approximately EIGHT lines, account for the urban problems that result from rapid urbanisation in cities in developing countries.

(4x 2) (8)

4.3 FIGURE 4.3 is an urban profile showing the relationship between land-use zones and building density



[Adapted from <a href="mailto:search?q=urban+land+use+zones&tbm=isch&tbs=rimg">search?q=urban+land+use+zones&tbm=isch&tbs=rimg</a>]

- 4.3.1 Refer to land-use zone **A**.
- (a) Name the land-use zone. (1x 1) (1)
- (b) State TWO characteristics of land-use zone **A**. (1x 1) (2)
- (c) Why is this land-use zone ideal for the location of light (1x 2) (2) industries?
- (d) Suggest ONE reason for land-use zone **A** having high (1 x 2) (2) land values.
- 4..3.2 Give TWO pieces of evidence that suggest that land-  $(2 \times 2) (4)$  use zone **B** is a residential zone of high income.
- 4.3.3 Explain why land-use zone **B** and land-use zone **C** are (2 x 2) (4) not compatible.

4.4 Study FIGURE 4.4 based on an informal settlement and associated issues.

#### FIGURE 4.4

**Durban** – Most of the major fires attended to in recent years by the eThekwini Fire department were in informal settlements. In July, a fire engulfed (surrounded) 300 shacks at the Kennedy Road Informal Settlement and killed Thembinkosi Mncwango.

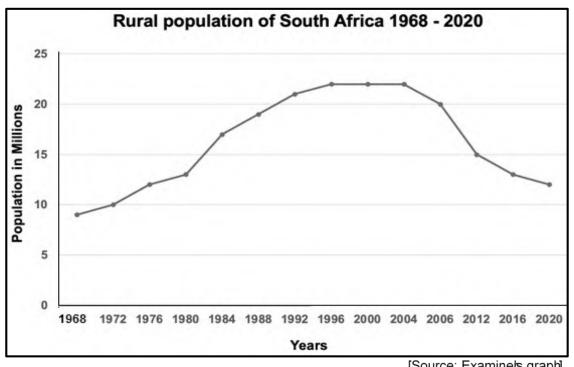
Winter is especially a time to be on high alert as there is an increase of fires breaking out.

It took fire fighters 10 hours to put out the fire that rapidly spread through the informal settlement. In May, children aged between 4 and 7 years, died while sleeping in a shack when it caught alight (burning) in Verulam. Existing settlements remain at risk due to the nature of construction material used, spacing among shacks, emergency accessibility challenges and human behaviour among other causes.

[Adapted from <a href="https://www.iol.co.za/dailynews/news/worst-blazes-in-citys-informal-settlements-18631790">https://www.iol.co.za/dailynews/news/worst-blazes-in-citys-informal-settlements-18631790</a>]

4.4.1	Define the term informal settlement.	$(1 \times 1)(1)$
4.4.2	According to the newspaper article, why is there an increased	
	risk of fires in informal settlements?	(2 x 1) (2)
4.4.3	Why does the occurrence of destructive fires increase in informal settlements in winter?	(2 x 2) (4)
4.4.4	In a paragraph of approximately EIGHT lines, explain how the local municipality can reduce fire hazards for people living in informal settlements.	
		(4x 2) (8)

#### 3.3 Refer to FIGURE 3.3, a graph on rural depopulation. FIGURE 3.3



[Source: Examinels graph]

- 3.3.1 Define the concept *rural depopulation*.  $(1 \times 2) (2)$
- 3.3.2 Determine the number of people living in the rural areas of South Africa in 2004.  $(1 \times 1) (1)$
- 3.3.3 Is the rural population showing an increase or a decrease from 2004 to 2020?  $(1 \times 1) (1)$
- 3.3.4 How will this trend (the answer to QUESTION 3.3.3) have a negative impact on the standard of living of the rural population?  $(2 \times 2) (4)$
- 3.3.5 Explain TWO social factors that contributed to rural depopulation in South Africa.  $(2 \times 2) (4)$
- 3.3.6 Suggest TWO sustainable strategies to encourage people to return to rural areas.  $(2 \times 2) (4)$

3.5 Refer to the cartoon in FIGURE 3.5 based on the importance of food security.

FIGURE 3.5: THE IMPORTANCE OF FOOD SECURITY



3.5.1. What is *food security*? (1 x 2) (2)
3.5.2. Why does the use of the words 'great news' not align (fit in) with the message of the cartoon? (1 x 2) (2)
3.5.3. Even if there was food security, why would it not help the people in the cartoon? (2 x 2) (4)
3.5.4. In a paragraph of approximately EIGHT lines, discuss ways to improve food security in South Africa. (4 x 2) (8)

4.6. Refer to FIGURE 4.6, a cartoon based on the informal sector.

#### FIGURE 4.6: THE INFORMAL SECTOR



4.6.1.	Define the term <i>informal sector.</i>	$(1 \times 2) (2)$
4.6.2.	What evidence in the cartoon indicates that the minister is not	
	in favour of the informal sector?	(1 x 1) (1)
4.6.3.	Suggest a possible reason for the minister not wanting informal street trading taking place.	(1 x 2) (2)
4.6.4.	Give TWO reasons why the informal sector is important for the informal trader.	(2 x 2) (4)
4.6.5.	In a paragraph of approximately EIGHT lines, discuss reasons for the growth of the informal sector in South Africa.	(4 x 2 ) (8)
		( . / . = ) (0)

#### 3.5. Refer to the extract in FIGURE 3.5 based on cattle farming in South Africa

# FIGURE 3.5: CATTLE FARMING IN SOUTH AFRICA TOUGH TIMES NEED TOUGHER CATTLE

With the ongoing drought and foot-andmouth disease outbreaks in South Africa. choosing the right cattle breed for production and breeding has never been more crucial. With its adaptability and high functional efficiency, Bonsmara cattle has proved itself the ideal breed to cope with, and thrive in, these challenging conditions.



The Bonsmara, bred for Africa's harshest conditions, has shown that it can adapt to the changing climate, reduced rainfall and warmer temperatures. The Bonsmara cow is capable of walking long distances to find grazing. The breed also adapts in both extensive and intensive agricultural environments. [Source: <a href="https://www.farmersweekly.co.za/animals/cattle/tough-times-need-tougher-cattle/">https://www.farmersweekly.co.za/animals/cattle/tough-times-need-tougher-cattle/</a>

3.5.1.	Identify ONE problem from the extract that poses a challenge	(1 x 1) (1)
	to cattle farmers	

3.5.2. Why, according to the extract, is the Bonsmara breed ideal for cattle farming? (1 x 2) (2)

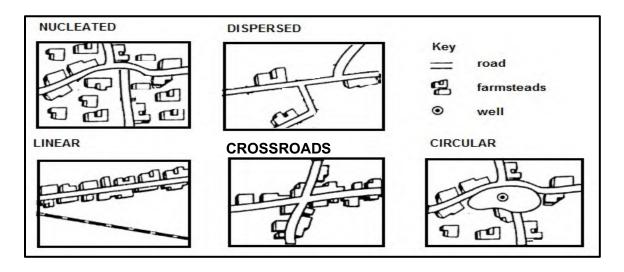
3.5.3. Suggest TWO ways in which the government can assist small-scale cattle farmers to increase beef production. (2 x 2) (4)

3.5.4. In a paragraph of approximately EIGHT lines, discuss how an (4 x 2) (8) increase in beef production can contribute to food security in South Africa.

- 3.1 Match the descriptions below with urban land use models **multiple nuclei**, **south African city**, **modern American western city**, **and third world city** to make the statements TRUE.Choose the answer and write only next to the question numbers (3.1.1 to 3.1.7) in the ANSWER BOOK, e.g. 3.1.8 MULTIPLE NUCLEI. You may choose the same model more than once.
- 3.1.1 This is an apartheid town planning model.
- 3.1.2 The CBD in this model is also called "downtown".
- 3.1.3 This model makes provision for all land use zones.
- 3.1.4 This model is most applicable to modern cities.
- 3.1.5 This model is characterized by mixed land use zones due to higher levels of urbanization.
- 3.1.6 Cities that have several focal points around which urban development occurs.
- 3.1.7 In this model, people depends on transport because of the separation between suburbs and workplace. (7 x 1) (7)
- 3.2 Various options are provided as possible answers to the following statements. Choose the answer and write only the letter (A–D) next to the question numbers (3.2.1 to 3.2.8) in the ANSWER BOOK, e.g. 3.2.9 D.
- 3.2.1 The economic sector associated with the provision of transport is referred to as the ... sector.
  - A primary
  - B secondary
  - C tertiary
  - D quaternary
- 3.2.2 The total value of all goods and services produced in one year within a country is called the ...
  - A GDP per capita
  - B gross domestic product.
  - C gross national product.
  - D gross domestic income.
- 3.2.3 An example of an economic activity concerned with the extraction of raw material is ...

Downloadec	יוו ג	oni Stannorepriysics.com		
	A B C D	Transport. construction. mining. research.		
3.2.4 An exchange	e of g	oods and services between countries is referred to as		
	A. B C D	International trade domestic trade. foreign exchange. trade balance.		
3.2.5 refers to (	goods	s that are brought into the country.		
	A B C D	Exports Imports Market Trade		
3.2.6 The domesti	ic ma	rket is also known as the market.		
	A B C D	regional foreign provincial home		
3.2.7 Income gen	erate	d by a country through exports refers to		
	A. B C D	Per capita income foreign exchange. export-orientated industries. export market.		
3.2.8 An example	of a A B C D	quaternary economic activity is fishing. ship building. service provision. research.	(8 x 1)	(8)

#### FIGURE 4.1: RURAL SETTLEMENT PATTERNS AND SHAPES



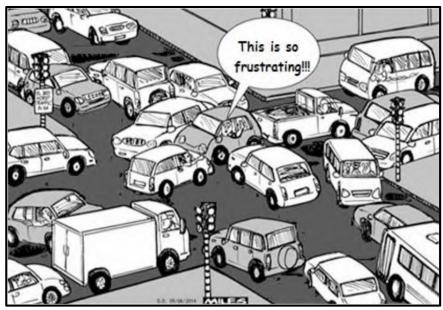
- 4.1 Refer to FIGURE 4.1 showing rural settlement patterns and shapes. Choose the correct answer from the options given in brackets to make the statement TRUE. Write only your answer next the question numbers (4.1.1 to 4.1.8) in the ANSWER BOOK, e.g. 4.1.9 dispersed.
- 4.1.1 A (dispersed/nucleated) settlement pattern is associated with large machinery.
- 4.1.2 The settlement pattern that encourages more community activities is (nucleated/dispersed).
- 4.1.3 The lack of safety and an increased vulnerability to crime is more predominant in (nucleated/dispersed) settlement patterns.
- 4.1.4 (Nucleated/Dispersed) settlement patterns are commonly associated with privately owned land.
- 4.1.5 The settlement that develops at the intersection of transport routes has as a (linear/crossroads) shape.
- 4.1.6 (Circular/Linear) shaped settlements develop around a focal point.
- 4.1.7 A (circular/linear) shaped settlement forms along transport routes.
- 4.1.8 The settlement shape responsible for the greatest accessibility is a (linear/crossroads) settlement. (8 x 1) (8)

- 4.2 Various options are provided as possible answers to the following statements. Choose the answer and write only the letter (A–D) next to the question numbers (4.2.1 to 4.2.7) in the ANSWER BOOK, e.g. 4.2.8 D.
- 4.2.1 ... is the staple food of many people in South Africa.
  - A. Fruit
  - B. Maize
  - C. Wheat
  - D. Beef
- 4.2.2 Agricultural activities are associated with the ... economic sector.
  - A. quaternary
  - B. secondary
  - C. tertiary
  - D. primary
- 4.2.3 ... is when people in a country have access to enough nutritious food.
  - A. Food insecurity
  - B. Malnutrition
  - C. Famine
  - D. Food security
- 4.2.4 An advantage of genetically modified (GM) crops is that they ...
  - A. have less nutritional value.
  - B. produce more food per hectare.
  - C. have a shorter storage life.
  - D. are less expensive.
- 4.2.5 Monoculture is a characteristic of ... farming.
  - A. small-scale
  - B. traditional
  - C. large-scale
  - D. subsistence
- 4.2.6 Sugar cane farming is mainly practised in ...
  - A. the Eastern Cape.
  - B. the Western Cape.
  - C. KwaZulu-Natal.
  - D. North West.
- 4.2.7 ... are factors that favour agricultural production in South Africa.

- A. Floods and climate change
- B. Research and climatic differences
- C. Crime and labour strikes
- D. Fluctuating prices and subsistence farming

(7 x 1) (7)

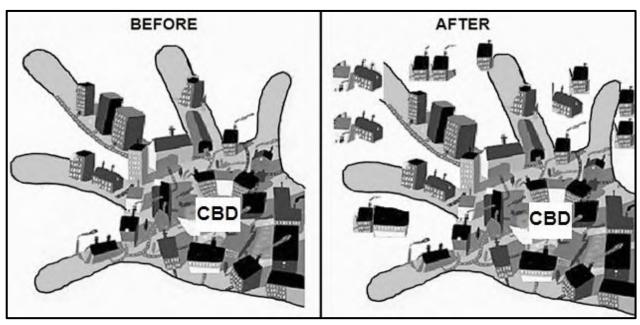
### 3.4 Refer to FIGURE 3.4, a cartoon based on an urban issue related to rapid



[Adapted from http://cartoonsbymiles.blogspot.com/2014/06/mixed-bag.html]

3.4.1	Identify the urban issue shown in the cartoon.	(1 x 1) (1)
3.4.2	Give a reason for your answer to QUESTION 3.4.1.	(1 x 2) (2)
3.4.3	Why is the urban issue in the cartoon common in most cities?	(2 x 2) (4)
3.4.4	In a paragraph of approximately EIGHT lines, discuss the negative impact of this urban issue on motorists.	(4 x 2) (8)

### 4.3 FIGURE 4.3 shows urban sprawl.



 $[Adapted\ from\ \underline{https://theurbanweb.wordpress.com/finger-plan-in-copenhagen-urban-sprawl}]$ 

4.3.1	Define the concept urban sprawl.	(1 x 1) (1)
4.3.2	Give evidence from FIGURE 4.3 that suggests that urban sprawl is taking place.	(1 x 2) (2)
4.3.3	Why do local authorities find it difficult to control urban sprawl?	(2 x 2) (4)
4.3.4	In a paragraph of approximately EIGHT lines, discuss the unfavorable environmental conditions caused by urban sprawl in the rural-urban fringe.	
	<b>0</b>	(4 x 2) (8)

### 4.4 Refer to FIGURE 4.4 based on an urban environmental justice issue.



[Adapted from https://pulitzercenter.org/reporting/south-africas-future-without-coal]

4.4.1	Define the concept environmental injustice	$(1 \times 2) (2)$
4.4.2	State the environmental injustice evident in FIGURE 4.4.	(1 x 1) (1)
4.4.3	Give evidence from the photograph to support your answer to QUESTION 4.4.2.	(1 x 1) (1)
4.4.4	Why is your answer to QUESTION 4.4.2 considered an	
	environmental injustice?	(2 x 2) (4)
4.4.5	Discuss how this environmental injustice will affect the local	
	community.	(2 x 2) (4)
4.4.6	Explain how local authorities can develop sustainable solutions	
	to reduce the impact of this injustice issue on the environment	(2 x 2) (4)

3.6. Refer to FIGURE 3.6 and study the information on the PWV (Gauteng) Industrial Region.

#### FIGURE 3.6: PWV (GAUTENG) INDUSTRIAL REGION

The PWV (Gauteng) Industrial Region is an integrated cluster of cities, towns and urban nodes that together make up the economic heartland of South Africa.

This region is the country's centre of trade within Southern Africa and beyond. PWV (Gauteng) produces more than 33,8% of the national GDP in current prices. PWV (Gauteng) is estimated to contribute about 45% of South Africa's total economic output.

Despite its importance, the PWV (Gauteng) region faces many challenges, such as water shortages and high levels of unemployment.



[Adapted from <a href="https://www.gcro.ac.za/about/the-gauteng-city-region/">https://www.gcro.ac.za/about/the-gauteng-city-region/</a>]

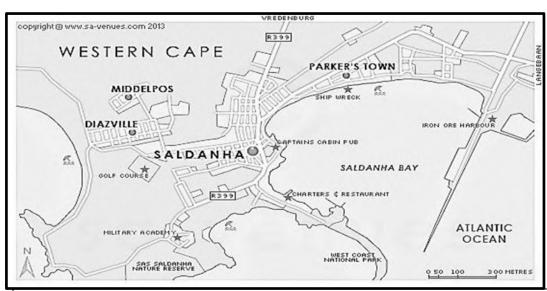
3.6.1.	Which of the urban settlements in the PWV (Gauteng)	
	Industrial Region shown in FIGURE 3.6 started out as a	(1 x 1) (1)
	gold mining settlement?	(1 X 1) (1)

- 3.6.2. Quote TWO statistics from FIGURE 3.6, which indicates that the PWV (Gauteng) Industrial Region is the economic heartland of South Africa. (2 x 1) (2)
- 3.6.3. Discuss TWO factors that have favoured the development of industries in the PWV (Gauteng) Industrial Region. (2 x 2) (4)
- 3.6.4. The PWV (Gauteng) Industrial Region faces many challenges, including high levels of unemployment and water shortages.
- 3.6.5. a) Why has water supply hindered the development of the PWV (Gauteng) Industrial Region? (1 x 2 ) (2)

4.5. FIGURE 4.5 is based on strategies for industrial development: the Saldanha Bay Industrial Development Zone (SBIDZ).

# FIGURE 4.5: STRATEGIES FOR INDUSTRIAL DEVELOPMENT: THE SALDANHA BAY INDUSTRIAL DEVELOPMENT ZONE (SBIDZ)

# NEW INVESTMENT IN THE SALDANHA BAY INDUSTRIAL DEVELOPMENT ZONE(SBIDZ)



The West Coast Corrosion Protection (WCCP) will nearly double their workforce as they position themselves to grow their already established business with the support of the SBIDZ fund.

As a small, local company in the corrosion protection and support services industry, the WCCP services a range of marine vessels in a number of ports across South Africa. Their new facility will provide a necessary base to expand their value and service offering to the maritime industry. It will oper doors to new markets and customers.

The SBIDZ has, to date, signed 11 lease agreements with an investmen value of over R3 billion. The development of the SBIDZ is key to unlocking the industrial potential of the West Coast, and Saldanha in particular.

Skills programmes initiated in the SBIDZ that focus on enterprise and contractor development have created a total of 2 199 individual training opportunities with 88% of participants having already graduated. Together with this, the local community benefits from social responsibility initiatives.

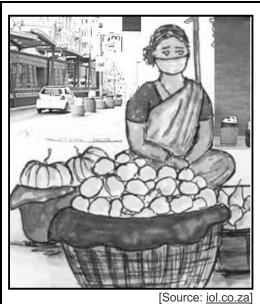
[Source:www.sbidz.co.za,https://www.savenues.com/maps/westerncape/saldanha.php]

- 4.5.1. Name the new local investor in Saldanha Bay. (1 x 1) (1)
- 4.5.2. What will be the core function of the new investor in the Saldanha Bay IDZ? .

4.5.3. State the physical (natural) factor that could have attracted the new investor to the Saldanha Bay IDZ. (1 x 1) (1) 4.5.4. Discuss how the new investment project in the Saldanha Bay IDZ would have a positive impact on transport infrastructure  $(2 \times 2) (4)$ in the zone.  $(2 \times 2) (4)$ How will investments in the Saldanha Bay IDZ have an 4.5.5. impact on the people seeking employment in this zone? 4.5.6. Suggest what social responsibility initiatives a new investment company should have towards the local community.  $(2 \times 2) (4)$ 

#### 4.6. Refer to FIGURE 4.6 based on the informal sector.

#### FIGURE 4.6: INFORMAL SECTOR



Informal trade is dominated by women in most countries.

South Africa's informal retail sector is made up of around 750 000 informal micro-retailers (mostly women) operating from home ('spaza' shops) and street vendors. They generate a total revenue of R31,8 billion per year.

Providing support to the informal sector could help South Africa relieve some of its unemployment pressures. There are few barriers to entering the informal sector. It provides in many of the local community's basic needs.

[Adapted from Citizenmatters-post-covid-16671]c

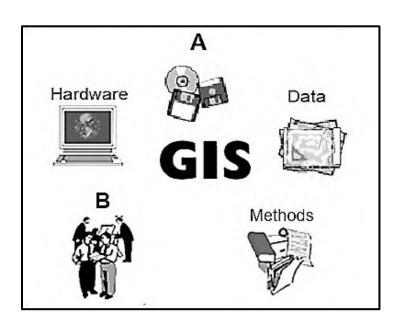
- 4.6.1. What example of informal trade, according to the extract, is shown in FIGURE 4.6? (1 x 1) (1)
- 4.6.2. How many people in South Africa are involved in the informal retail sector? . (1 x 1) (1)
- 4.6.3. Quote evidence from the extract to suggest that the informal sector is a much easier option to gain employment. (1 x 1) (1)
- 4.6.4. According to the extract, why are so many women employed in the informal sector? (2 x 2) (4)
- 4.6.6. In a paragraph of approximately EIGHT lines, discuss the positive impact that the informal sector has on the economy of South Africa. (4 x 2) (8)

### MAPWORK QUESTIONS BASED ON RUSTERNBURG MAP

1.1	The contour interval on the orthophoto map is metres.			
	A. 5 B. 1 C. 2 D. 2	0 0		
1.2	The n	nap inc	lex of the topographic map, south-west of 2527CA RUSTENBURG, is .	
	A B. C. D.	25270 25260 25270 25260	DD. AC.	
			ivity within the Magaliesberg Protected Natural Environment on the part of the sector.	
		A B C D	primary secondary tertiary quaternary	
1.4	The	feature	e at <b>2</b> on the orthophoto map is a/an	
	B. m C. s	ndustry nall. chool. tation.		
1.5			interval (VI) from the industries at <b>3</b> (1 160 m above sea level) to the on at <b>4</b> (1 148 m above sea level) on the orthophoto is	
	A.	21m		
	B.	12m		
	C.	20m		
	D.	5m		

- 1.2 Refer to blocks **C10** and **G7** on the topographic map.
- 1.2.1 Identify the street plans (patterns) at **S** in block **C10** and at **T** in block **G7**.

Street plan S:			
Stree	t plan T:		
1.2.2	Identify the settlement pattern at Kutlwanong covered by block C8/C9.	(2 x 1) (2)	
		_ (1 x 1) (1)	
1.2.3	Are the industries in block G9 on the topographical market-orientated or raw material-orientated?		
		_ (1 x 1) (1)	
1.2.4	Farming in block D9 is an example of a primary or secondary economic	activity.	
		(1 x 1) (1)	

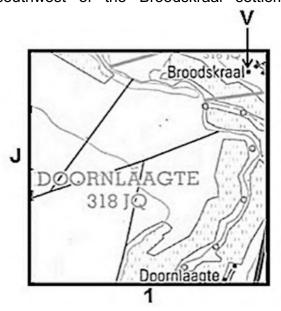


1.3.1 Identify the components **A** and **B**.

# 

 $(1 \times 1)(1)$ 

- 4.2. Two locations (blocks F10 and H7 on the topographic map) have been identified for the development of a new cemetery. A GIS specialist has been appointed by the local municipality to recommend the best site for this development.
- 4.2.1. Which of the TWO locations (block F10 or block H7) will be most suitable for the development of the new cemetery? (1 x 1) (1)
- 4.2.2. Identify TWO data layers that can be used in deciding on the new location for the cemetery. (2 x 1) (2)
- 4.2.3. Give a reason for your choice of ONE of the data layers identified in QUESTION 4.2.2. (1 x 2) (2)
- 4.3. Refer to block J1 on the topographic map.
  - 4.3.1. What is vector data? (1 x 1) (1)
  - 4.3.2. Give ONE natural line feature that the farmer used to determine the site of the cultivated land in block J1. (1 x 1) (1)
  - 4.3.3 Agricultural activity in block J1 on the topographic map is confined along the river.
    - (a) Draw the symbol of the point feature that is used to extract ground water to increase water supply for agriculture, on the enlarged illustration of block J1 below. This feature must be 40 mm southwest of the Broodskraal settlement (V).



(1 x 2) (2)

b) Explain the advantage of this specific location of the point feature drawn in QUESTION 4.3.3(a) for farming in the area.

(1 x 2) (2)

4.4.	Rustenburg is dominated by mining activities. Geologist	ts want to
	examine the underlying rock structure through research, to h	nelp miners
	determine the machinery to be used.	
4.4.1.	Is the data collected considered as primary or secondary?	(1 x 1) (1)
4.4.2.	Give a reason for your answer.	(1 x 2) (2)
4.2.3.	Explain the role of remote sensing in assisting geologists with their research.	$(2 \times 2) (4)$