

# education

Department:
Education
PROVINCE OF KWAZULU-NATAL

# NATIONAL SENIOR CERTIFICATE

**GRADE 12** 

**GEOGRAPHY P1** 

PREPARATORY EXAMINATION

**SEPTEMBER 2020** 

**MARKS: 225** 

TIME: 3 hours

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#### **INSTRUCTIONS AND INFORMATION**

- 1. This question paper consists of FOUR questions.
- 2. Answer ANY THREE questions of 75 marks each.
- 3. ALL diagrams are included in the ANNEXURE.
- 4. Leave a line open between subsections of questions answered.
- 5. Start EACH question at the top of a NEW page.
- 6. Number your answers correctly according to the numbering system used in this question paper.
- 7. Do NOT write in the margins of your ANSWER BOOK.
- 8. Where possible, illustrate your answers with labelled diagrams.
- 9. Write clearly and legibly.

### SECTION A: CLIMATE, WEATHER AND GEOMORPHOLOGY

Answer at least ONE question from SECTION A. If you answer ONE question from SECTION A you must answer both questions from SECTION B.

#### **QUESTION 1**

- 1.1 Refer to FIGURE 1.1 based on a cross-section of a tropical cyclone. Choose the correct answer from the alternatives given within brackets. Write only the answer next to the question number (1.1.1 to 1.1.8) in your ANSWER BOOK. Example 1.1.9 Vortex
  - 1.1.1 The stage of development represented in FIGURE 1.1 is the (initial/mature) stage.
  - 1.1.2 The cloud type labelled **A** is a (stratus/cumulonimbus) cloud.
  - 1.1.3 The warm core represented by label **B** is a part of (eye / dangerous semi-circle) of the tropical cyclone.
  - 1.1.4 The warm core at **B** is formed as a result of (heating by condensation/adiabatic heating).
  - 1.1.5 The pressure above the ocean surface labelled **C** is (high/low).
  - 1.1.6 The air is (converging/diverging) at **D**.
  - 1.1.7 The wind speed is strongest at the (eyewall/warm core).
  - 1.1.8 The general direction of movement of the tropical cyclone is (westerly/easterly). (8 x 1)(8)
- 1.2 FIGURE 1.2 shows the changing cross profiles of the valley along the rivers course. Match the profiles A, B or C with the description given below. Write only the letter A, B or C next to the question numbers (1.2.1 1.2.7) in your ANSWER BOOK. Example, 1.2.8 C.
  - 1.2.1 The valley is steep and deep.
  - 1.2.2 The main geomorphological process in this course is deposition.
  - 1.2.3 The flow in this course is turbulent.
  - 1.2.4 Characterized predominantly by lateral and downward erosion.
  - 1.2.5 Landform features such as waterfalls and rapids are common.
  - 1.2.6 The mouth of the river is found in this course.
  - 1.2.7 The valley is wide and deep.

 $(7 \times 1)(7)$ 

- 1.3 Refer to FIGURE 1.3 showing a synoptic weather map.
  - 1.3.1 Why is the mid-latitude cyclones on the synoptic map referred to as a family of cyclones?

 $(1 \times 1)(1)$ 

1.3.2 Give ONE reason why mid-latitude cyclone **B** is considered older than cyclone **A**.

 $(1 \times 1)(1)$ 

1.3.3 Explain ONE reason why front labelled **C** is not associated with heavy rain.

 $(1 \times 2)(2)$ 

1.3.4 Refer to the weather symbol at station **D**.

Provide TWO reasons for the extremely cold and dry conditions.

 $(2 \times 2) (4)$ 

1.3.5 In a paragraph of approximately EIGHT lines explain measures that people living in the Eastern Cape can take to reduce the negative impact associated with mid-latitude cyclones.

(4 x 2) (8)

- 1.4 Refer to FIGURE 1.4 showing Berg winds over South Africa.
  - 1.4.1 Give the synoptic conditions evident in FIGURE 1.4 that is necessary for the development of Berg winds.

(2 x 1) (2)

- 1.4.2 Describe the cloud cover and temperature conditions that exists over the plateau during the occurrence of berg wind conditions.
- (2 x 1) (2)
- 1.4.3 State, with a reason, the temperature characteristics of berg winds experienced along the coastal areas of South Africa.
- (2 x 1) (2)
- 1.4.4 Discuss the impact that berg winds can have on the health of people.
- $(2 \times 2) (4)$
- 1.4.5 Berg winds intensify veld fires. Suggest TWO strategies that farmers can implement to prevent the spreading of these veld fires.
- $(2 \times 2) (4)$

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### 1.5 Refer to FIGURE 1.5 which shows a delta.

	1.5.1	Define the term delta.	(1 x 1) (1	1)
	1.5.2	Identify the course of the river in which the delta, in FIGURE 1.5, developed.	(1 x 1) (1	1)
	1.5.3	What term is given to the river channels (branches), labelled A?	(1 x 1) (	1)
	1.5.4	Explain TWO conditions necessary for the formation of deltas.	(2 x 2) (4	4)
	1.5.5	Discuss TWO economic importance of deltas to farmers located at <b>B</b> .	(2 x 2) (	4)
	1.5.6	Suggest why deltas can be regarded as a threat to the community living in the village.	(2 x 2) (	(4)
1.6	Refer	to FIGURE 1.6 showing river capture.		
	1.6.1	Define the term river capture.	(1 x 1) (	1)
	1.6.2	What purpose does feature <b>A</b> serve?	(1 x 1) (	(1)
	1.6.3	Why is river <b>B</b> most likely to be the captor stream?	(1 x 1)(	1)
	1.6.4	Explain why stream <b>C</b> will have a larger amount of gravel.	(2 x 2) (	(4)
	1.6.5	In a paragraph of approximately EIGHT lines, assess the implications that river capture will have on communities that depend on river <b>C</b> for economic activities.	(4 x 2) (	(8) [ <b>75]</b>

#### **QUESTION 2**

- 2.1 FIGURE 2.1 shows anticyclones over South Africa. Match the anticyclones with the descriptions given below. Write only the answer next to the question number (2.1.1 2.1.7) in the ANSWER BOOK. Example, 2.1.8 Kalahari High.
  - 2.1.1 The pressure cell that results in high rainfall along the coast of South Africa.
  - 2.1.2 The pressure cell that pushes cool air into South Africa from the south west.
  - 2.1.3 A weak cell that allows rising convection currents to reach the interior in summer.
  - 2.1.4 The anticyclone that results in north-easterly winds over the coast of South Africa.
  - 2.1.5 The anticyclone that causes clear stable conditions over the interior of South Africa in winter.
  - 2.1.6 The anticyclone that shows the smallest seasonal locational changes.
  - 2.1.7 The pressure cell that is responsible for the vertical position of the inversion layer during summer and winter. (7 x 1) (7)

2.2 Choose the term from the list below that best matches the geomorphological description given. Write only the correct answer next to the question number (2.2.1 – 2.2.8) in the ANSWER BOOK. Example 2.2.9 parallel

radial centrifugal;	superimposed;	dendritic;	deranged;	trellis;
antecedent;	parallel;	rectangular;	radial centripe	etal;

- 2.2.1 Tributaries join the main stream at acute angles.
- 2.2.2 Streams flow away from a central point.
- 2.2.3 The drainage system maintains its original course over a landscape that has undergone uplift.
- 2.2.4 Forms in jointed igneous rocks.
- 2.2.5 Forms in areas of alternate hard and soft rocks.
- 2.2.6 Stream pattern that flows into a basin or central pan.
- 2.2.7 The drainage system displays a pattern that bears no relation to the geology and relief of the landscape.
- 2.2.8 Develops in glacial regions and no specific pattern can be identified.

 $(8 \times 1)(8)$ 

- 2.3 Refer to FIGURE 2.3 which shows development of the line thunderstorm.
  - 2.3.1 The high pressure systems on the map form part of a global pressure belt. Name this global pressure belt.

 $(1 \times 1)(1)$ 

2.3.2 Explain how the air movements at **A** and **B** causes the development of the moisture front.

 $(1 \times 2)(2)$ 

- 2.3.3 Use both the map and the photo to answer the questions that follow:
  - (a) Identify the cloud type that developed at **E** during the formation of the moisture front.

 $(1 \times 1)(1)$ 

(b) Name the type of rainfall that will occur in the area shown in the photo.

 $(1 \times 1)(1)$ 

(c) Will the settlement in the photo be found at **C** or **D** on the map? Explain your answer.

(1 + 2)(3)

In a paragraph of approximately EIGHT lines, discuss the impact that this type of rainfall (answer to QUESTION 2.3.3(b)) will have on the agricultural activities in the area surrounding the settlement.

 $(4 \times 2)(8)$ 

- 2.4 Study FIGURE 2.4 showing conditions created by temperature inversion over a city located in a valley.
  - 2.4.1 Define the term temperature inversion.

 $(1 \times 1)(1)$ 

2.4.2 Does FIGURE 2.4 A or FIGURE 2.4 B represent day conditions?

(1 x 1) (1)

2.4.3 Give a reason for your answer to QUESTION 2.4.2.

 $(1 \times 2)(2)$ 

2.4.4 Compare the air movements at **B** in FIGURE 2.4 A with that of the air movements at **C** in FIGURE 2.4 B

(2 x 2) (4)

2.4.5 Explain how building density in FIGURE 2.4 contributes to higher temperatures within the CBD.

 $(1 \times 2)(2)$ 

2.4.6 The amount of pollution trapped below layer **A** will end up on the valley floor at night. Discuss the impact that the pollution would have on the CBD.

 $(2 \times 2)(4)$ 

2.5	Study FIGURE	2.5 showing a	drainage basin
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	2.5.1	Define	the term <i>drainage density.</i>	(1 x 1) (1)
	2.5.2		evidence from the sketch that suggests that the river system low drainage density.	(1 x 1)(1)
	2.5.3		y TWO natural factors that may have resulted in a low age density in FIGURE 2.5.	(2 x 1)(2)
	2.5.4	Refer	to the point labelled <b>A</b> on the river system.	
		(a)	Determine the stream order at A.	(1 x 2)(2)
		(b)	Explain how high rainfall in the catchment area will impact on the existing steam order at <b>A</b> .	(2 x 2) (4)
	2.5.5	Discu increa	ss how farming activities along the river course could ase the drainage density of the river system in FIGURE 2.5.	(2 x 2) (4)
2.6	Refer	to FIG	SURE 2.6 based on catchment management.	
	2.6.1	Defin	e the term catchment management.	(1 x 1) (1)
	2.6.2	Give is imp	ONE reason from the extract why catchment management portant to South Africa?	(1 x 1) (1)
	2.6.3	Menti degra	ion TWO reasons why the Rietvlei wetland area has been aded.	(2 x 1)(2)
	2.6.4	How Rietv	will the people living in Pretoria benefit from restoring the lei wetland area?	(2 x 2) (4)
	2.6.5	i In a p rehat	paragraph of approximately EIGHT lines, discuss ideas to bilitate (make good) the Rietvlei catchment area.	(4 x 2) (8) <b>[75]</b>

# SECTION B: RURAL AND URBAN SETTLEMENT, ECONOMIC GEOGRAPHY OF SOUTH AFRICA

Answer at least ONE question from this section. If you answer ONE question from SECTION B you must answer both questions from SECTION A.

#### **QUESTION 3**

- 3.1 Refer to FIGURE 3.1. Choose the correct land use/land use zones for each of the following descriptions given below. Write only the land use/land use zone next to the question number (3.1.1–3.1.8) in the ANSWER BOOK. Example, 3.1.9.
  - 3.1.1 The land use zone in which airports are generally situated.
  - 3.1.2 Commercial land use with the highest land value.
  - 3.1.3 The land use that helps reduce the harmful effects of the urban heat island.
  - 3.1.4 The high density residential land use zone usually found close to industries.
  - 3.1.5 Mixed land use zone that allows for further expansion of the CBD.
  - 3.1.6 The type of industrial zone that produces large amounts of pollution.
  - 3.1.7 Land use development formed due to housing shortages.
  - 3.1.8 Businesses found away from the city centre due to commercial decentralization. (8 x 1) (8)
- 3.2 Refer to FIGURE 3.2 showing the percentage of employment in each economic sector to answer the questions. Write only the answer next to the question number (3.2.1 3.2.7) in the ANSWER BOOK. Example, 3.2.8 Primary.
  - 3.2.1 Which economic sector employs the largest labour force?
  - 3.2.2 Which primary economic activity employs the larger percentage of people?

- 3.2.3 Which sector employs the lowest percentage of the labour force?
- 3.2.4 To which sector of the economy does construction belong?
- 3.2.5 What percentage of the labour force does the construction activity employ?
- 3.2.6 Give the economic activity that employs the largest number of people in the secondary sector.
- 3.2.7 Which economic activity employs the lowest number of people?  $(7 \times 1)(7)$
- 3.3 Refer to FIGURE 3.3 showing shopping behaviour patterns.
  - 3.3.1 What term is given to line  $\bf A$  showing shopping behaviour patterns? (1 x 1)(1)
  - 3.3.2 Differentiate between the terms sphere of influence and range. (2 x 1) (2)
  - 3.3.3 Explain why a city would have a higher sphere of influence than a town. (1 x 2)(2)
  - 3.3.4 Give an example from FIGURE 3.3 for each of the following:
    - (a) a low order function that people will travel the shortest distance.
    - (b) a high order function that people will travel a longest distance. (2 x 1) (2)
  - 3.3.5 Explain why people are not prepared to travel a greater distance for convenience goods. (1 x 2)(2)
  - 3.3.6 The success of a business depends on the threshold population.
    - (a) Determine the relationship between the threshold population and the order of service. (1 x 2) (2)
    - (b) Explain the impact of locating a high order service in an area with a low threshold population. (2 x 2) (4)

3.4	Refer to FIGURE 3.4 which shows street patterns.			
	3.4.1	Name	e street patterns labelled <b>A, B</b> and <b>C</b> .	(3 x 1)(3)
	3.4.2	Desc	ribe TWO advantages of street pattern <b>B</b> .	(2 x 1) (2)
	3.4.3	Refe	r to street pattern <b>A</b> .	
		(a)	Why will this particular layout of street pattern be ideal for a low-cost housing area?	(2 x 1)(2)
		(b)	Street pattern <b>A</b> was historically common in the CBD. In a paragraph of approximately EIGHT lines, explain why this layout of street pattern is not ideal for a modern-day city centre and discuss strategies town planners have utilized to manage the problems.	(4 x 2)(8)
3.5	Refer	to FIG	SURE 3.5 an article on food security.	(
	3.5.1	Defin	e the term food security.	(1 x 1)(1)
	3.5.2	Which affect	h sector of the South African economy could be most ed by the prevailing drought conditions?	(1 x 1) (1)
	3.5.3		reference to the article, give the main reason for the ent drought condition in South Africa.	(1 x 1) (1)
	3.5.4		in ONE way in which the current drought is impacting on security in South Africa.	(1 x 2) (2)
	3.5.5	contri	reference to the article, discuss ONE social factor that butes to the negative impact of the drought on food ity in the country.	(1 x 2) (2)
	3.5.6	sustai	aragraph of approximately EIGHT lines, suggest inable strategies that Agri SA could have suggested to the approximately in South Africa	(4 × 2) (8)

 $(4 \times 2)(8)$ 

government to ensure food security in South Africa.

- 3.6 Refer to FIGURE 3.6 showing South Africa's four main industrial regions according to their industrial output.
  - 3.6.1 Identify the industrial regions that has the largest and the smallest industrial output respectively.

 $(2 \times 1)(2)$ 

3.6.2 (a) Which industrial region does not have direct access to a harbour?

 $(1 \times 1)(1)$ 

(b) Mention TWO disadvantages for the industrial region mentioned in QUESTION 3.6.2 (a) not having direct access to a harbour.

 $(2 \times 2)(4)$ 

3.6.3 Discuss TWO factors that favour the development of industrial activities in industrial region 1.

 $(2 \times 2)(4)$ 

3.6.4 Discuss the importance of industrial activities to the economic development of South Africa.

 $(2 \times 2)(4)$ 

[75]

#### **QUESTION 4**

- 4.1 Refer to FIGURE 4.1. Match the descriptions below with settlement **A** or **B**. Write only the letter **A** or **B** next to the question number (4.1.1 4.1.7) in the ANSWER BOOK, for example 4.1.8 A.
  - 4.1.1 The type of settlement that is mainly unifunctional.
  - 4.1.2 The settlement with high density buildings.
  - 4.1.3 These settlements include hamlets.
  - 4.1.4 This settlement is associated with the extraction of raw materials from the natural environment.
  - 4.1.5 This type of settlement will occupy a higher position in the urban hierarchical ranking order.
  - 4.1.6 The settlement is dominated by secondary and tertiary activities.
  - 4.1.7 This settlement relies on a central place for tertiary services.  $(7 \times 1)(7)$
- 4.2 Various options are provided as possible answers to the statements below. Read the statements carefully and choose only the letter (A D) that best matches the statements. Write only the letter next to the question number (4.2.1 4.2.8) in the ANSWER BOOK, for example 4.2.9 A.
  - 4.2.1 The mineral mined at Richards Bay in KwaZulu-Natal is ...
    - A gold.
    - B titanium.
    - C iron.
    - D uranium.
  - 4.2.2 The mineral that is often referred to as 'black gold' is ...
    - A iron ore.
    - B gold.
    - C coal.
    - D platinum.

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4	4.2.3	The er	nergy generated from coal is	
		A B C D	nuclear energy. thermal energy. hydro-electricity biomass-energy	
	4.2.4	The co	ompany that generates fuels from coal is	
		A B C D	Engen. Caltex. Sasol. Shell.	
	4.2.5		a by-product resulting from production of coal that supplies link ries with raw materials.	
		A B C D	Carbon dioxide Sulphuric acid Briquettes Benzene	
	4.2.6	A phy	sical factor that favours mining in South Africa is	
		A B C D	the availability of low cost labour. the availability of capital. ready markets. the low thermal gradient of rock layers.	
	4.2.7	An ec	conomic factor that hinders mining in South Africa is	
		A B C D	the lack of unskilled labour supply. the dependence on foreign markets. the lack of markets. the high amount of rainfall.	
	4.2.8	stainl	adding value to minerals and metals such as carbon steel, ess steel, aluminium, platinum and gold through a variety of esses.	
		A B C D	Beneficiation Foreign exchange Nationalisation Global recession	(8 x 1)(8)

4.3 Refer to FIGURE 4.3 which illustrates an urban land use model and answer the following questions.

4.3.1	Name the urban land use model in FIGURE 4.3.	
-------	--	--

 $(1 \times 1)(1)$ 

4.3.2 Identify residential land use zones labelled **A** and **B** respectively.

 $(2 \times 1)(2)$ 

4.3.3 Discuss ONE reason why urban land use models are important for modern urban development.

 $(1 \times 2)(2)$ 

4.3.4 Evaluate ONE reason for locating zone **B** away from the industrial zone.

 $(1 \times 2)(2)$ 

4.3.5 In a paragraph of approximately EIGHT lines discuss how the model shown in FIGURE 4.3 shares similarities with most South African cities.

 $(4 \times 2)(8)$ 

4.4 Refer to FIGURE 4.4 on land reform in South Africa.

4.4.1 Define the term *land reform*.

 $(1 \times 1)(1)$ 

4.4.2 What is the meaning of "expropriation of land without compensation."

 $(1 \times 1)(1)$ 

4.4.3 Mention ONE factor cited in the article that posed a challenge to the success of land reform policy.

(1 x 1) (1)

4.4.4 Why is the government drafting a new Expropriation Bill?

 $(2 \times 2) (4)$ 

4.4.5 Explain why many land claimants (those that wanted their land back) settled for cash rather than land that was promised.

 $(2 \times 2) (4)$ 

4.4.6 Discuss the support strategies that the President intends to put in place to ensure the success of the programme.

 $(2 \times 2) (4)$ 

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4.5		Refer to FIGURE 4.5 an extract on the Platinum Spatial Development Initiative (SDI).		
	4.5.1	Name	the province in which the Platinum SDI was initiated.	(1 x 1) (1)
	4.5.2		y the TWO economic sectors that were responsible for g this SDI.	(2 x 1) (2)
	4.5.3		a reason for the decline in the economic status of the ipalities in this region.	(1 x 2) (2)
	4.5.4	Explai	in the main aim of the Platinum SDI.	(1 x 2) (2)
	4.5.5	future this in	Platinum SDI may have many positive spin-off effects in the e. In a paragraph of approximately EIGHT lines, access how expression in the local people and the ery as a whole.	(4 x 2) (8)
4.6	Refer	to FIG	URE 4.6 on South Africa's Energy Crisis.	
	4.6.1	Define	e the term <i>load-shedding</i> in terms of electricity.	(1 x 1)(1)
	4.6.2	Why h	nas South Africa implemented load-shedding?	(1 x 1)(1)
	4.6.3	(a)	Which category, according to the statistics provided in FIGURE 4.6, uses the highest percentage of electricity?	(1 x 1)(1)
		(b)	Give a reason evident in FIGURE 4.6 for your answer to QUESTION 4.6.3 (a).	(1 x 2) (2)
	4.6.4		percentage off electricity is used by the primary sector in Africa?	(1 x 2)(2)
	4.6.5		ain how South Africa's small businesses will be affected by shedding.	(2 x 2) (4)
	4.6.6		uss TWO possible initiatives that can be implemented by mall businesses to reduce their electricity usage.	(2 × 2) (4) [75]

**TOTAL MARKS: 225** 



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**GRADE 12** 

**GEOGRAPHY P1** 

**ANNEXURE** 

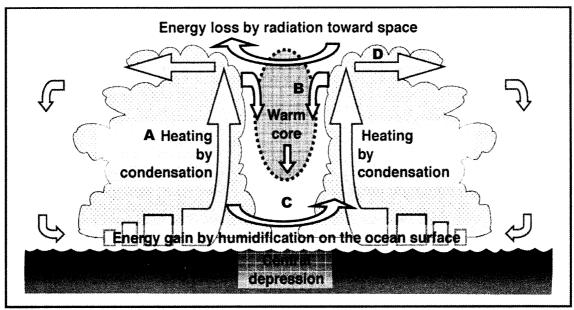
**SEPTEMBER 2020** 

PREPARATORY EXAMINATION

This Annexure consists of 14 pages.

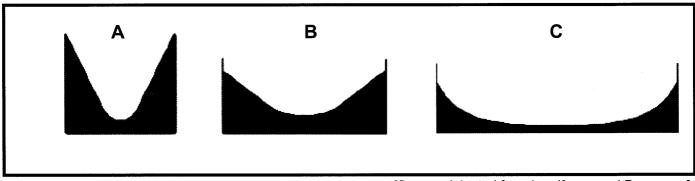
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#### FIGURE 1.1: CROSS-SECTION OF A TROPICAL CYCLONE



Source: https://www.encyclopedie-environnement.org

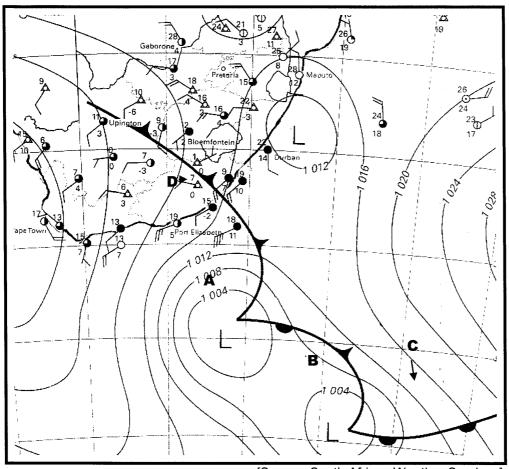
FIGURE 1.2: CROSS PROFILES



[Source: Adapted from Landforms and Processes]

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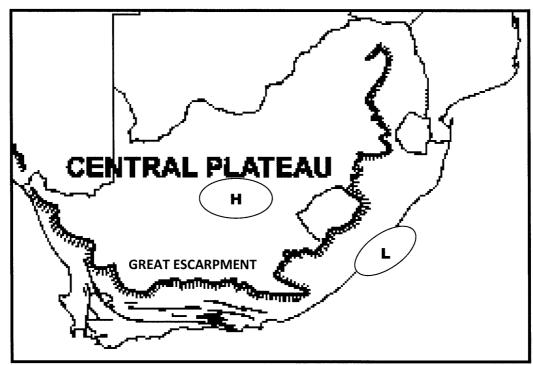
FIGURE 1.3: SYNOPTIC WEATHER MAP



STATION MODEL D

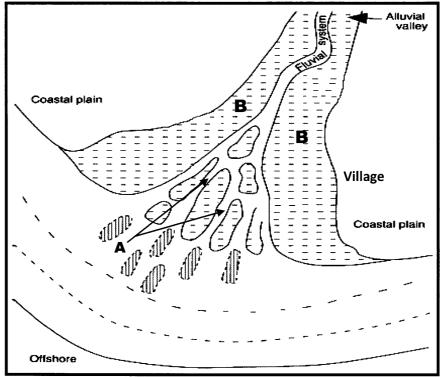
[Source: South African Weather Services]

**FIGURE 1.4: BERG WINDS** 



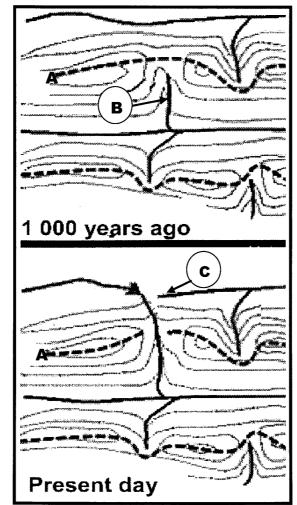
[Source: <a href="https://www.google.com/=berg+winds+diagram">https://www.google.com/=berg+winds+diagram</a>]

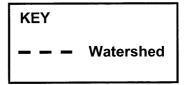
# Downloaded from Stanmorephysics.com FIGURE 1.5: DELTA



[Source: https://www.google.com/search?q=diagram+of+deltas]

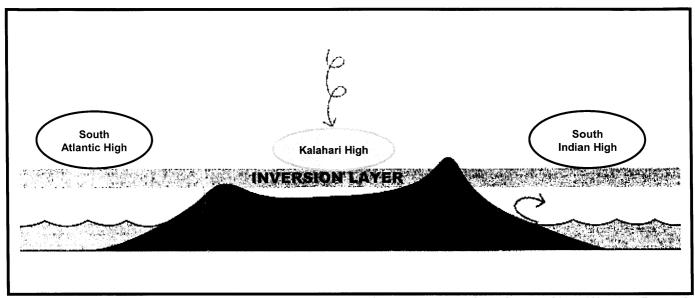
#### **FIGURE 1.6: RIVER CAPTURE**





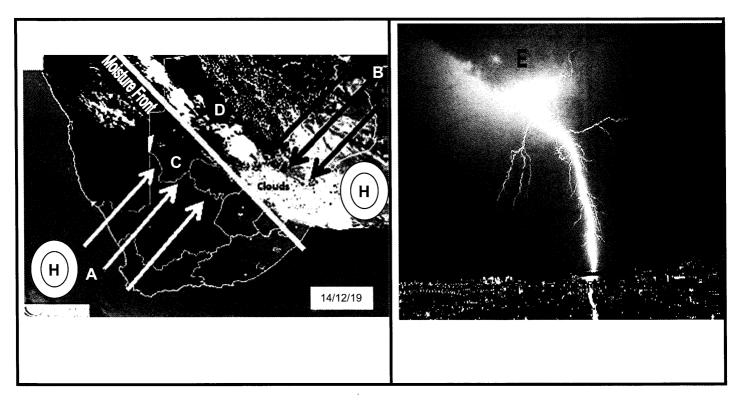
[Source: Adapted from Geomorphological Processes]

#### FIGURE 2.1: ANICYCLONES OVER SOUTH AFRICA



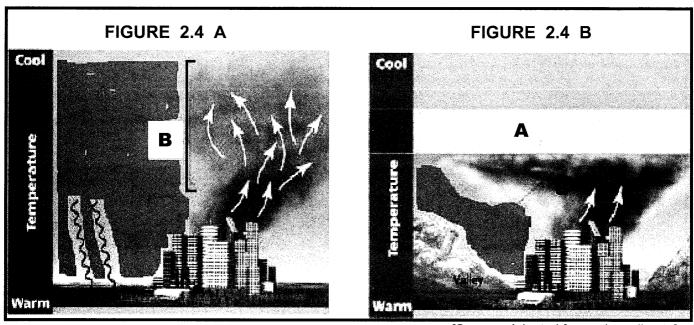
[Source: Adapted from South African Weather Pattern]

FIGURE 2.3: LINE THUNDERSTORM



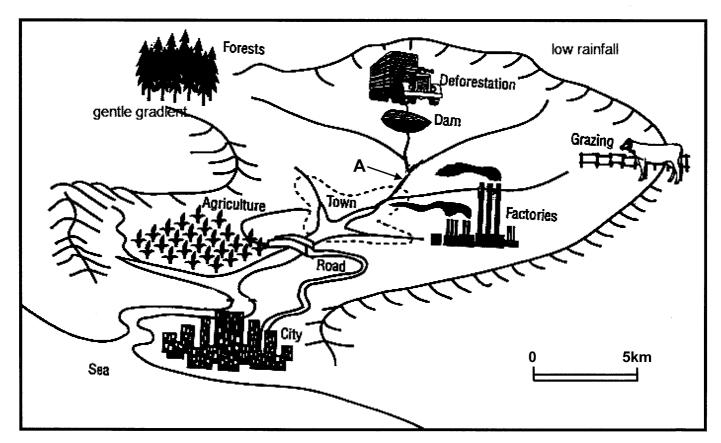
[Source: Adapted from <a href="https://www.bing.com/images/search?">https://www.bing.com/images/search?</a>= <a href="line+thunderstorms+in+south+africa&simid">line+thunderstorms+in+south+africa&simid</a>]

#### FIGURE 2.4: TEMPERATURE INVERSION



[Source: Adapted from urban climate]

**FIGURE 2.5: DRAINAGE BASIN** 



[Source: Adapted from igcserevise.weebly.com]

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#### FIGURE 2.6: CATCHMENT MANAGEMENT

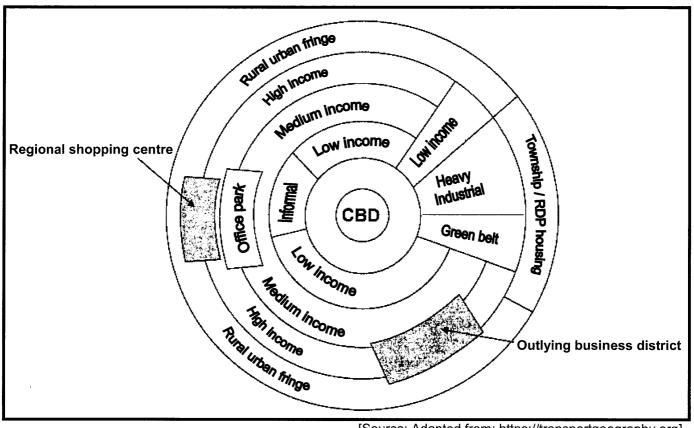
#### **Rietvlei Catchment Management**

Projections indicate that by 2025 the country's water requirements will outstrip supply unless urgent steps are taken to manage the resources more sustainably. 65 percent of South Africa receives less than 500 mm average annual rainfall, meaning that drought is an ever-present risk. The growing water crisis is made worse by the fact that about half of South Africa's wetlands in the catchment area have been lost. It is against this background that the South African government, working in partnership with WWF and others, has initiated catchment management programmes.

There are currently 56 catchment and wetland rehabilitation projects under way, employing about 2950 previously disadvantaged people. At Rietvlei, a wetland part of the catchment area close to Pretoria, 280 people are employed in rehabilitating a degraded peatland that was drained in the 1960's for peat mining, dryland cropping and irrigation purposes. Upstream urban townships and industrial areas contribute to serious pollution. Rietvlei supplies nearly 20 percent of Pretoria's water and is owned by the municipality. In effect, the remaining 80 percent of water has to be bought in, there is a strong economic drive to manage water wisely.

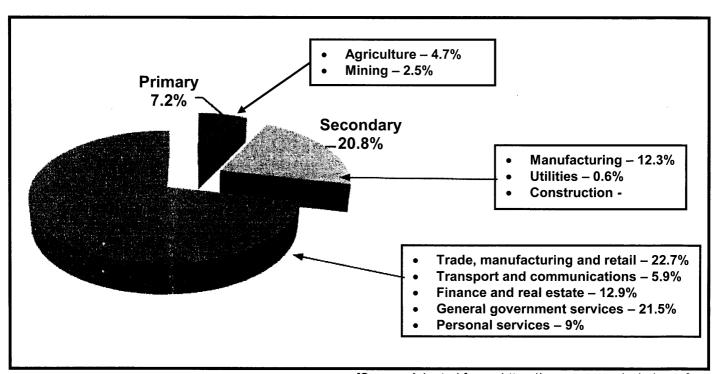
[Source: http://www.naturalresorces.nsw]

FIGURE 3.1: URBAN LAND USE ZONES



[Source: Adapted from: https://transportgeography.org]

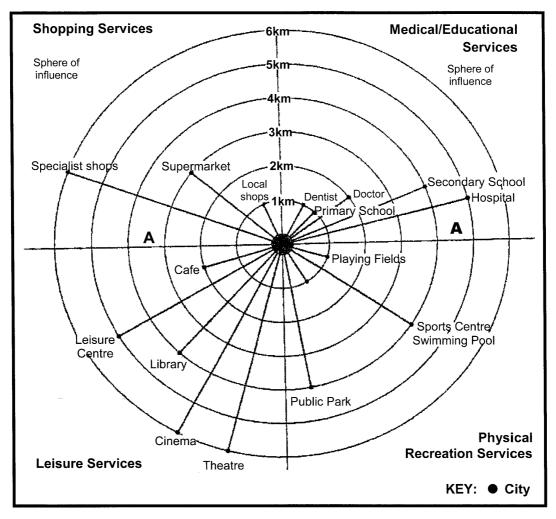
FIGURE 3.2: PERCENTAGE OF EMPLOYMENT IN DIFFERENT ECONOMIC SECTORS



[Source: Adapted from: https://www.economicshelp.org]

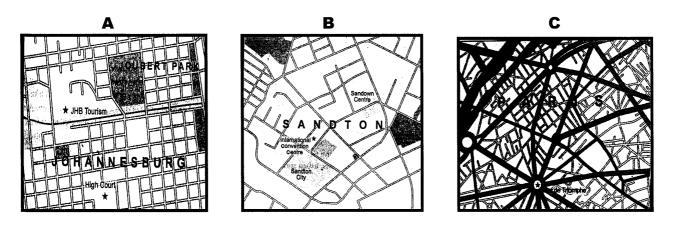
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#### FIGURE 3.3: SHOPPING BEHAVIOUR PATTERNS



[Source: Adapted from:https//www.managementguide.com]

**FIGURE 3.4: STREET PATTERNS** 



[Source: Adapted from: www.titanweb.co.za]

#### ...

## Downloaded from Stanmorephysics.com

#### FIGURE 3.5: FOOD SECURITY

#### **Drought threatens South Africa's food security**

JOHANNESBURG - AGRI SA has issued a stern warning that the prevailing drought conditions could collapse rural economies and decimate the country's entire agricultural industry. Farmers had taken massive financial losses with 37.5percent of rural South Africa affected. Yields per year are down and farmers are planting less.

Western Cape have seen a loss of 25 percent in the value of export crops. They are also shedding jobs due to drought. Agri SA said grain and livestock producers had been particularly affected by the unnatural dry weather conditions, below normal rainfall and warm weather. Several Karoo towns had suffered the same fate as boreholes and dams had dried up.

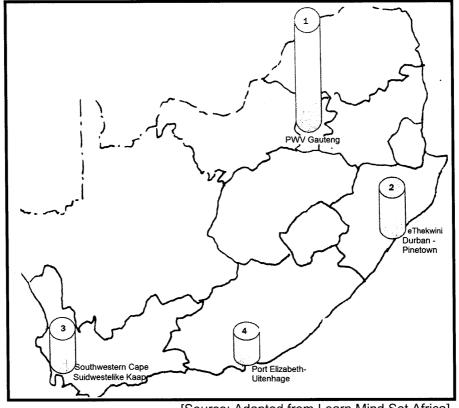
While South Africa was one of the most food secure countries in the world the current drought can result in an entire economic downturn. As a country, we are not managing climatic disasters very well as we do not have adequate disaster management plans in place.

Land Reform and Rural Development warned that drought conditions would persist and water restrictions would remain in place in several provinces. Agri SA executive director, Omri van Zyl, said "We are pleading with the government to accept our recommendations to maintain food security in South Africa."

Adapted from THE MERCURY Nov 13 2019 By Siphelele Dludla

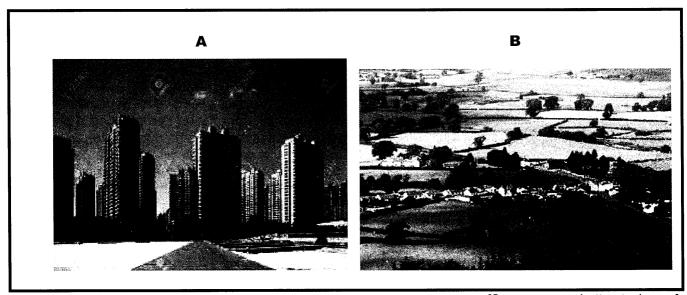
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#### FIGURE 3.6: INDUSTRIAL REGIONS



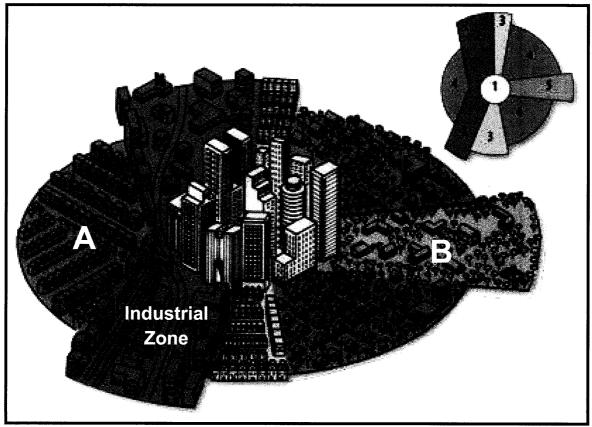
[Source: Adapted from Learn Mind Set Africa]

FIGURE 4.1: TYPES OF SETTLEMENTS



[Source: www.shutterstock.com]

#### FIGURE 4.3: URBAN LAND USE MODEL



[Source: https://quizlet.com/297323125/hoyt-model-diagram/]

#### FIGURE 4.4: LAND REFORM

#### Land Reform

President Cyril Ramaphosa at the State of Nation Address (SONA) stated that:

"Unless we change the patterns of land ownership in this country, unless we give all South Africans access to land for agriculture, for commerce, for housing, we will not only be perpetuating a grave injustice, but we will also be constraining the economic potential of our land and our people".

"The lack of land is- alongside the lack of skills – one of the greatest impediments to growth and prosperity. It is this reason that we are undertaking a programme of accelerated land reform that focuses not only on redistribution, restitution and tenure reform, but also on the support that beneficiaries need – the form of training, finance and extension services ... - to be a successful farmer".

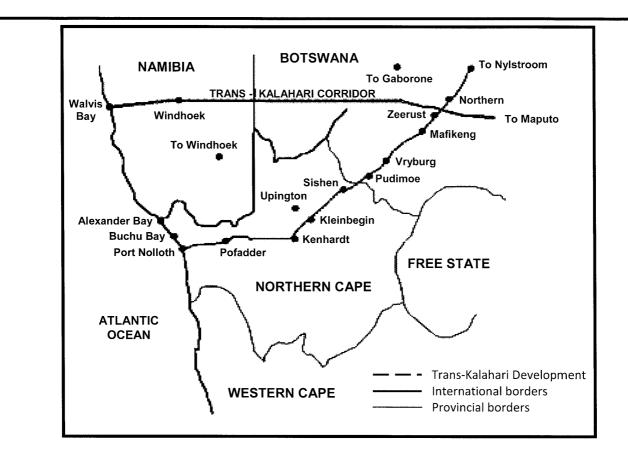
The new Expropriation Bill serves as a key legislative tool to empower the state to expropriate land for a public purpose or in the public interest. This is just one mechanism available to the government to effect redistribution and equitable access to land.

\*Expropriation\* means action by the state or an authority of taking property from its owner for the use or benefit to the public.

[Source: Adapted from www.dailymaverick.co.za]

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#### FIGURE 4.5: THE PLATINUM SPATIAL DEVELOPMENT INITIATIVE



The Platinum Spatial Development Initiative (SDI) in the North West Province was initiated in 1996, by the Department of Trade and Industry together with the Department of Transport. The initiative involved developing a strip of land about a hundred kilometers wide between Gauteng and Lobatsi in Botswana along the N4 highway.

The economy of municipalities of the North West Province are mainly dependent on gold mining, which is declining as their gold reserves are becoming depleted which will lead to a large section of its population being unemployed in the near future. The aim was to address the spatial economic development challenges of the region, with the intention of identifying industries that can offer future growth and job creation. Platinum mining, tourism, agricultural and industrial ventures were identified. It was found that the sectors with the highest growth potential are Transport Equipment, Petroleum and Chemicals, Furniture, Metal Products, wood and paper products, food and beverages and electronics, which merit attention in future development initiatives.

The idea was to generate linkages with the rest of the province, gradually developing the whole province and eventually the country. The Maputo/Trans-Kalahari corridor, stretches from Maputo harbour in the east to Walvis Bay in Namibia.

[Source: www.researchgate.net]

#### FIGURE 4.6: SOUTH AFRICA'S ENERGY CRISIS

Swift and decisive action needs to be taken to respond to the prevailing crisis of energy supply. The greatest demand for electricity comes, as more and more households have access to electricity.

It is necessary to urgently address the negative impact that power outages or load shedding is having on the daily lives of the people and the economy. Load shedding has become a daily reality for all South Africans and cast a long shadow over already difficult economic conditions. Minister of Minerals and Energy, Gwede Mantashe, suggested to move ahead with investors about starting a power utility outside of Eskom.

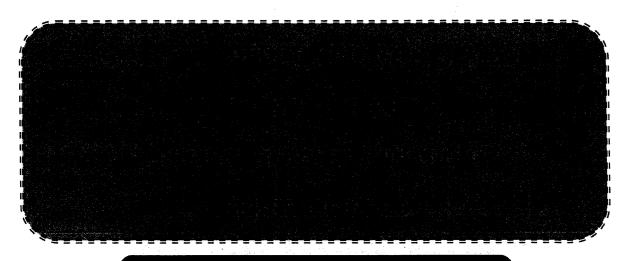
Activity / Category	Number of Customers	Percentage %	
Domestic	6 846 330	94	
Agriculture	99 054	1.4	
Mining	2 003	0.03	
Manufacturing	43 952	0.6	
Commercial	243 212	3.3	
Transport	2 153	0.3	
General	36 105	0.5	
Total	7 272 809	100	

[Source: https://m.news24.com Source: dailymaverick.co.]



# eduerdon

Department: Education PROVINCE OF KWAZULU-NATAL



# NATIONAL SENIOR CERTIFICATE

**MARKS: 225** 

This marking guideline consists of 19 pages.

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#### SECTION A: CLIMATE AND WEATHER AND GEOMORPHOLOGY

#### **QUESTION 1**

1.1

- 1.1.1 mature ✓
- 1.1.2 cumulonimbus ✓
- 1.1.3 eye ✓
- 1.1.4 adiabatic heating ✓
- 1.1.5 low ✓
- 1.1.6 diverging ✓
- 1.1.7 eyewall ✓
- 1.1.8 westerly ✓

 $(8 \times 1)(8)$ 

1.2

- 1.2.1 A ✓
- 1.2.2 C ✓
- 1.2.3 A ✓
- 1.2.4 B ✓
- 1.2.5 A ✓
- 1.2.6 C ✓
- 1.2.7 B ✓

 $(7 \times 1)(7)$ 

1.3

1.3.1 The mid-latitude cyclones are linked/attached. ✓  $(1 \times 1)(1)$ 1.3.2 Situated furthest east/furthest south east/more east as mid-latitude cyclones move from west to east. ✓  $(1 \times 1)(1)$ 1.3.3 Gentle gradient results in warm air being uplifted slowly. ✓✓ Gentle rising of air causes the stratus, altostratus, cirrostratus. clouds that is not associated with much rain. < Less rain from nimbostratus cloud. ✓✓ Less moisture causes less rain. ✓ ✓  $(1 \times 2)(2)$ (ANY ONE) 1.3.4 South west winds blowing over the cold benguela current. ✓✓ Cold winds from the South Atlantic High advects onto the land.✓✓ Cold winds are dry/lack moisture. ✓✓ The cold front has passed over the area. <  $(2 \times 2) (4)$ (ANY TWO) 1.3.5 Putting early warning systems so that people can prepare. ✓✓ People can take steps to limit effects/dress warm.√√ People living in low lying areas/close to rivers can evacuate/move to higher ground.✓✓ Placing sand bags at doors to avoid water entering homes. ✓ ✓ Temporary shelters/assembly points. ✓✓ Creating emergency transport routes/emergency services. < Possilility of snow, stay indoors. ✓✓ Slippery roads travel safely. ✓✓ Visibility problems, ensure lights in working condition. ✓✓ Stock on on batteries/candles. ✓✓ Stock up on foodstuff/supplies. ✓✓ Stock up on medical supplies. ✓✓ Stock farmers must ensure safety of cattle. ✓ ✓ (Any FOUR)  $(4 \times 2)(8)$ 

1.4

1.4.1 Continental/Kalahari High ✓ and coastal Low ✓ (2 x 1) (2)

1.4.2 Clear skies ✓ and low temperatures ✓ (2 x 1) (2)

1.4.3 Hot and dry. ✓

Air is compressed and warms adiabatically/air heats up because of friction.  $\checkmark$ 

OR

Air originates from the interior. ✓

 $(2 \times 1) (2)$ 

```
1.4.4 Makes people lethargic/lazy ✓✓
             High discomfort level ✓✓
             Cause head aches ✓✓
             Nose bleeds ✓✓
             Dehydration ✓✓
             Respiratory Problems√✓
                                                       (2 \times 2) (4)
             (ANY TWO)
      1.4.5 Create fire breakers. ✓✓
             Erect look out towers. ✓✓
             Build farm dams. ✓✓
             Create public awareness on fires. <
                                                                                   (2 \times 2) (4)
             (ANY TWO)
1.5
       1.5.1 A river delta is a low-lying plain or landform that occurs at the
             mouth of a river near where it flows into an ocean or another
             larger body of water. ✓
                                                                                   (1 \times 1)(1)
             (Concept)
       1.5.2 Lower course ✓
                                                                                   (1 \times 1)(1)
       1.5.3 Distributaries ✓
                                                                                   (1 \times 1)(1)
       1.5.4 The river must have a large amount of sediments. ✓✓
             The sea must have weak currents and a small tidal range. ✓✓
             The sea must be shallow at the river mouth. ✓✓
                                                                                   (2 \times 2) (4)
             (ANY TWO)
       1.5.5 Fertile land / soil / alluvium for farming. ✓✓
             Plenty of water for fishing or aquaculture to provide an economic
             income. ✓✓
              Flat land promotes mechanisation and increase production. \checkmark\checkmark
                                                                                   (2 \times 2)(4)
              (ANY TWO)
       1.5.6 Deltas are a constant risk of flooding. ✓✓
             Vulnerable to rising sea levels. ✓✓
              Water is often dirty and polluted. ✓✓
              Mosquitoes are attracted to stagnant water leading to diseases/
              malaria. ✓✓
              Storm surges from tropical storms can wipe out the village. ✓✓
              Costly to build roads and bridges. ✓✓
              (ANY TWO)
                                                                                   (2 \times 2)(4)
```

1.6

1.6.1 One river robs another river of its headwaters through headward erosion. ✓

 $(1 \times 1)(1)$ 

(Concept)

1.6.2 Separates two drainage basins. ✓

 $(1 \times 1)(1)$ 

1.6.3 Flowing over a steeper gradient. ✓

 $(1 \times 1)(1)$ 

 $(2 \times 2) (4)$ 

1.6.4 The river has been robbed of its headwaters. ✓✓

Volume of water has decreased. ✓✓

The river is starting to dry up. ✓✓

The river does not have the capacity to carry its load. <

The velocity/speed had been reduced resulting in deposition. ✓✓

There is a reduction in the energy. ✓✓

1.6.5 Lower production if the land is used for farming. ✓✓

Less water for irrigation. ✓✓

Farmers will abandon farms resulting in rural urban migration. ✓✓

Less water for industries. ✓✓

Industries may have to shut down. ✓✓

Loss of jobs/retrenchment. ✓✓

Income will decrease leading to lower standard of living. <

Negative impact on resorts/recreational activities along the river. ✓✓

Reduced water levels in dams along river C. ✓✓

Less water to generate hydro-electric power. ✓✓

Less food available to sell in the local markets. ✓✓

Food insecurity. ✓✓

Increase in the food prices. </

 $(4 \times 2)(8)$ 

[ANY FOUR]

## **QUESTION 2**

2.1

- 2.1.1 South Indian High ✓
- 2.1.2 South Atlantic High✓
- 2.1.3 Kalahari High ✓
- 2.1.4 South Indian High ✓
- 2.1.5 Kalahari High ✓
- 2.1.6 South Atlantic High ✓
- 2.1.7 Kalahari High ✓

 $(7 \times 1) (7)$ 

2.2

- 2.2.1 dendritic ✓
- 2.2.2 radial centrifugal ✓
- 2.2.3 antecedent ✓
- 2.2.4 rectangular ✓
- 2.2.5 trellis ✓
- 2.2.6 radial centripetal ✓
- 2.2.7 superimposed / Antecedent ✓
- 2.2.8 deranged ✓

 $(8 \times 1)(8)$ 

2.3.1 Sub-tropical high ✓

 $(1 \times 1)(1)$ 

2.3.2 The cold dry air masses from the Atlantic Ocean (A) meet the warm and moist air masses from the Indian Ocean (B). 🗸 🗸

 $(1 \times 2)(2)$ 

2.3.3 (a) Cumulonimbus ✓

 $(1 \times 1)(1)$ 

(b) Frontal rain ✓

 $(1 \times 1)(1)$ 

(c) D ✓
Line thunderstorms develop to the east of the moisture front ✓ ✓

The warm moist north easterly winds from the Indian ocean rise along the front.  $\checkmark\checkmark$  (1 + 2)(3)

(d) Negative impact

Heavy rainfall will cause flooding. 🗸 🗸
Lightning may cause veldfires destroying crops. 🗸 🗸
Lightning may strike animals and cause death. 🗸 🗸
Can cause soil erosion which will influence productivity of the soil in the long run. 🗸 🗸

# **Positive impact**

Rainfall will fill dams for irrigation purposes. 

After flooding the soil will be naturally fertilized due to silt deposits. 

Ground water will be revived. 

Learners to indicate both negative and positive aspects (Any FOUR)

 $FOUR) (4 \times 2) (8)$ 

2.4

2.4.1 The increase in temperature with height. ✓ (Concept)

(1 x 1) (1)

2.4.2 FIGURE 2.4 A ✓

 $(1 \times 1)(1)$ 

2.4.3 Short wave radiation/incoming solar sadiation. ✓
Large amounts of air rising/convection currents/thermal currents. ✓
Greater vertical air movements. ✓
(1

(Any ONE)

 $(1 \times 1)(1)$ 

2.4.4 B - greater updrafts/more warm air rising. ✓ ✓ - The smoke is rising higher up. ✓✓ - More convection/thermal currents to distribute pollution during the day. ✓✓ - The vertical extent of the pollution dome increase during the day. ✓✓ C - The inversion layer is preventing the air from rising. ✓✓ - The smoke is trapped by the inversion layer. ✓✓ - Less convection/thermal currents to distribute pollution at niaht. ✓✓ - There is a horizontal extent of the pollution dome. <  $(2 \times 2)(4)$ (ANY ONE COMPARISON) 2.4.5 The large number of tall buildings reduces the flow of air (wind) in the city centre and temperatures remain high. Heat is also trapped between the buildings because of the high building density.  $(1 \times 2)(2)$ (ANY ONE) 2.4.6 Increased levels of air pollution at night. ✓✓ Increased levels of smog. ✓✓ The air within the city will be poisonous with high levels of toxicity. < Acid rain which results in peeling of paint of buildings. 🗸 🗸 Higher rainfall and can cause flood damage. ✓✓ More regular painting of road markings as acid rain makes it peel easier. ✓✓ Buildings decay and dilapidate faster. ✓✓ Soot accumulation on buildings. < Glass and transparent material in buildings are stained and/or damage easily. ✓✓ Greater chance of metal structures rusting/corroding. ✓✓ Concrete surfaces become pitted (holes). ✓✓  $(2 \times 2) (4)$ Damage to plants. ✓✓ (Any TWO) 2.5.1 The total length of all the streams and rivers in a drainage basin divided by the total area of the drainage basin. ✓  $(1 \times 1)(1)$ (Concept) 2.5.2 Few tributaries/few streams cover a large area. ✓  $(1 \times 1)(1)$ 2.5.3 Low rainfall ✓

 $(2 \times 1)(2)$ 

Gentle gradient ✓

Forests ✓

(ANY TWO)

2.5

2.5.4 (a)	2 <sup>nd</sup> order ✓✓	(1 x 2) (2)
(b)	The stream order at <b>A</b> will increase. $\checkmark\checkmark$	

There will be more 1st order streams/finger tip streams will increase/the order of subsequent streams will increase.

 $(1 \times 2) (2)$ 

2.5.5 Overgrazing by animals will remove natural vegetation which will increase the run off thereby increasing the drainage density. 

Incorrect ploughing methods can result in more water flowing down the furrows thereby increasing the drainage density. 

Over cultivation of farmlands, destroys vegetation and top soil, accelerating run off thereby increasing the drainage density. 

(ANY TWO)

 $(2 \times 2) (4)$ 

2.6

- 2.6.1 Sustainable conservation of the river and its drainage basin. ✓ (1 x 1) (1) (Concept)
- 2.6.2 Catchment management plays an important part in reducing pollution levels downstream. ✓
  65 percent of South Africa receives less than 500 mm average annual rainfall. ✓
  Drought is an ever-present risk. ✓
  (Any ONE) (1 x 1)(1)

2.6.3 Peat mining ✓
Dryland cropping ✓
Irrigation purposes ✓
Upstream urban townships ✓
Industrial areas contribute to serious pollution ✓
(ANY TWO) (2 x 1) (2)

2.6.4 People can get employment in the rehabilitation programme. ✓ ✓
Better quality and quantity of water will be available for domestic use. ✓ ✓
More water available for industries. ✓ ✓
(ANY TWO) (2 x 2)(4)

2.6.5 Legislation is needed to control the use of the underground sources of water and the pollution of groundwater. ✓✓
Legislation to control what is discharged into rivers. ✓✓
Vegetation must be maintained in the riparian zone. ✓✓
Clearing of vegetation and planting of alien trees must be controlled. ✓✓
Buffer zones to control the establishment of settlements in the catchment area must be enforced. ✓✓
Farmers must be educated on environmentally sustainable farming practices. ✓✓
Catchment areas must be conserved and restored. ✓✓

 $(4 \times 2)(8)$ 

### **QUESTION 3**

3.1

- 3.1.1 Rual urban fringe ✓
- 3.1.2 CBD ✓
- 3.1.3 Green belt ✓
- 3.1.4 Low income ✓
- 3.1.5 Transitional ✓
- 3.1.6 Heavy industries ✓
- 3.1.7 Informal ✓
- 3.1.8 OBD/Outlying Business District ✓ Regional shopping centre

 $(8 \times 1)(8)$ 

3.2

- 3.2.1 Tertiary ✓
- 3.2.2 Agriculture ✓
- 3.2.3 Primary ✓
- 3.2.4 Secondary ✓
- 3.2.5 7.9 ✓
- 3.2.6 Manufacturing ✓
- 3.2.7 Utilities√

 $(7 \times 1)(7)$ 

3.3.1 Desire lines/ Range ✓

 $(1 \times 1)(1)$ 

3.3.2 sphere of influence – the area from which a business draws its customers. ✓

range - Maximum distance a customer is willing to travel to purchase goods and service. ✓

 $(2 \times 1)(2)$ 

3.3.3 City has a higher population than a town. 🗸

Greater amount of specialized functions than a town. 🗸 🗸

Greater amount of high-order services. ✓✓

Greater range of good and services. ✓✓

(ANY ONE)

[Accept the opposite for towns]

 $(1 \times 2) (2)$ 

3.3.4 (a) local shop √/dentist √/ primary school √/ playingfields√/ golf course√

(ANY ONE)

(b) specialist shops√/cinema√/theatre√ (ANY ONE)

 $(2 \times 1)(2)$ 

3.3.5 The cost of the goods will exceed the cost of transport/saves money. <

Convenience goods are readily available. 🗸 🗸

Saves time ✓✓

(ANY ONE)

 $(1 \times 2) (2)$ 

3.3.6 (a) The higher the order of the service, the higher the threshold population 🗸 OR The lower the order of service, the lower the threshold population. <  $(1 \times 2) (2)$ (ANY ONE)

The business or service will not have a large enough (b) clientele or support base. </

The business will not make any profits. <

The business will run at a loss. </

The business will have to shut down. ✓✓

 $(2 \times 2) (4)$ 

3.4.1 A grid iron ✓

B irregular/planned irregular √

C cobweb / radial ✓

(ANY TWO)

 $(3 \times 1)(3)$ 

3.4.2 Fewer intersections can alleviate traffic congestion. ✓
Can be established in areas of uneven topography. ✓
Streets can vary in length and size. ✓
Creates aesthetic appeal/ not boring. ✓
Has alternate routes so that you can get from one place to another easier. ✓
The Cul-de-sac feature is quiter and safer for children/there is a greater sense of privacy. ✓

 $(2 \times 1)(2)$ 

3.4.3 (a) Easy to plan and layout/easy to subdivide ✓ Facilitate pedestrial movement ✓

 $(2 \times 1)(2)$ 

(b) Not ideal for modern-day city centre

Roads are too narrow to accommodate the increase in vehicles. ✓✓
Roads cannot be extended. ✓✓
Greater number of vehicles, causes traffic congestion/grid lock. ✓✓
Too many intersections/robots hampers flow of traffic. ✓✓

## **Strategies**

Decentralisation of commercial functions. 

Synchronized robots to accelerate flow of traffic. 

Better and public transport more attractive. 

Introduce staggered working hours. 

Make one way streets to speed up traffic flow. 

Introduce fees/levies for cars entering the CBD. 

Park and ride facilities. 

Organise and encourage lift clubs. 

Create separate lanes for buses and taxis. 

(4 x 2) (8)

(CANDIDATES MUST MENTION BOTH REASONS AND STRATEGIES)

3.5 3.5.1 It is the availability of nutritious food and having access to it at any time. ✓ (Concept)  $(1 \times 1)(1)$ 3.5.2 Agricultural Sector/Farming Sector/Primary Sector ✓  $(1 \times 1)(1)$ 3.5.3 Low rainfall /below normal rainfall / warm weather ✓  $(1 \times 1)(1)$ 3.5.4 Decrease in food production/Yields per year are down/farmers are planting less. ✓✓  $(1 \times 2)(2)$ 3.5.5 Poor drought management/inadequate disaster management plans. ✓✓  $(1 \times 2) (2)$ 3.5.6 Establishment of national management plan commission. ✓ ✓ Insurance system to assist farmers affected by the drought. < Establishing a drought relief fund. < Education on good agricultural practices. </ NGO'S giving help through donations. ✓✓ Specialized farming methods/Scientific farming methods. ✓✓ Drought resistant, insect resistant seeds. ✓✓ Intensive farming on a small scale using specialised equipment and seeds can also ensure a high yield. ✓✓ Introduce genetically modified seeds. < Government subsidy for farmers√√ (Any FOUR)  $(4 \times 2)(8)$ 3.6 3.6.1 Largest is PWV / 1 ✓ Smallest is Port Elizabeth-Uitenhage ✓  $(2 \times 1) (2)$ 3.6.2 (a) PWV / Gauteng ✓  $(1 \times 1) (1)$ (b) The large distance between PWV/Gauteng area and the harbour increases the transport cost. <

(b) The large distance between PWV/Gauteng area and the harbour increases the transport cost. ✓✓
It takes a longer time for the mine products to reach the harbour for exportation. ✓✓
Greater chance for goods to be damaged during transportation to harbour. ✓✓
Costs more for insurance to transport goods. ✓✓
Industries must increase prices to consumer to pay for additional costs. ✓✓
(ANY TWO)

3.6.3 The availability of flat land. ✓✓

The availability of relatively cheap land. ✓✓

A well-developed infrastructure. ✓✓

Wide range of raw materials to support production. ✓✓

Large skilled/unskilled labour pool. ✓✓

Large domestic market. ✓✓

(ANY TWO)

(2 x 2) (4)

3.6.4 Accelerate the country's growth and development. ✓✓
Indirectly increases raw material production. ✓✓
Job creation provide people with income and alleviate poverty. ✓✓
Economic empowerment of previously disadvantaged groups. ✓✓
To establish trade relationship. ✓✓
Industries earn foreign exchange. ✓✓
Allows for an increase in the South Africans standard of living. ✓✓
Makes a large contribution to South Africa's GDP. ✓✓
(2 x 2) (4)
(ANY FOUR)

# **QUESTION 4**

4.1

- 4.1.1 B ✓
- 4.1.2 A ✓
- 4.1.3 B ✓
- 4.1.4 B ✓
- 4.1.5 A ✓
- 4.1.6 A ✓
- 4.1.7 B ✓

 $(7 \times 1)(7)$ 

4.2

- 4.2.1 B ✓
- 4.2.2 C ✓
- 4.2.3 B ✓
- 4.2.4 C ✓
- 4.2.5 C ✓
- 4.2.6 D <
- 4.2.7 B ✓
- 4.2.8 A ✓

 $(8 \times 1)(8)$ 

4.3  $(1 \times 1)(1)$ Sector model/ Hoyts 4.3.1 4.3.2 **A:** Low Income ✓  $(2 \times 1)(2)$ B: High Income ✓ 4.3.3 Urban planners will be able to understand the location different land use zones. ✓✓ Zones of decay are easily identified. ✓✓ Urban planner will be able to predict urban sprawl and growth patterns. ✓✓  $(1 \times 2)(2)$ [ANY ONE] 4.3.4 Stay as far away from pollution. ✓✓ Maintain high land value. ✓✓  $(1 \times 2)(2)$ (ANY ONE) 4.3.5 CBD is centrally located. ✓✓ City is built on flat land. ✓✓ Land use zones in the shape of sectors/wedges radiating from the CBD. ✓✓ Transport systems are easily and equally accessible across the city. ✓✓ Well defined socio-economic areas (lower; middle and higher income). ✓✓ Influenced by the western capitalist model of private property. High land values based on preferred locations. ✓✓ Colonial heritage has influenced many SA cities. 🗸 🗸 Apartheid town planning played a major role in creating segregated and unequal cities.

Transport routes also play a role in the development of some cities.  $\checkmark\checkmark$  [ANY FOUR] (4 x 2) (8)

Buffer zones exist between various residential areas. ✓✓

others are based on accessibility. </

The location of the CBD varies, some are centrally located while

4.4.1 Changing of laws regarding land ownership/Equitable access to land/ Address the inequality in land ownership/injustices of the past. ✓ [Concept]

 $(1 \times 1)(1)$ 

4.4.2 Compulsory acquisition of land from private owners by the state for public use or in the interest of public.

Concept

 $(1 \times 1)(1)$ 

4.4.3 Lack of land ✓ Lack of skills ✓

(ANY ONE)

 $(1 \times 1)(1)$ 

4.4.4 The open market of willing seller willing buyer failed. ✓✓

The present Bill protects the rights of private property owners. 🗸

Presently the constitutions rule of law protects the rights of owners. 🗸 🗸

To speed up the process of land reform. ✓✓

Allows the state to purchase land and speed up readdressing the racial disparities. <

To speed up the support of skills, financial support, extension services. ✓✓

To prevent costly legal processes. </

The new Bill allows the state to expropriate land – no willing seller willing buyer clause. ✓✓

[ANY TWO]

 $(2 \times 2)(4)$ 

4.4.5 The slow long drawn process. ✓✓

Lack of agricultural skills. ✓✓

Lack of finances/poverty. ✓✓

Lack of support by the government. ✓✓

Some of the beneficiaries live in urban areas and are not willing to move back to the rural areas. <

The beneficiaries do not own the land so the banks can not grant loans. ✓✓

Poor farming/infertile land. ✓✓

Nepotism and corruption in the distribution of land.  $\checkmark\checkmark$ 

(ANY TWO)

 $(2 \times 2)(4)$ 

4.4.6 People will be trained on farming techniques to ensure the success of farming. ✓✓

> Loans/subsidies will be provided so that farming can be carried out. ✓✓

Extension officers will assist farmers. </

The farmers have an option to extend their leases after a period of time. <

(ANY TWO)

 $(2 \times 2) (4)$ 

4.5.1	North West Province ✓	(1 x 1) (1)
4.5.2	Department of Trade and Industry ✓ Department of Transport ✓	(2 x 1) (2)
4.5.3	Decline in the gold reserves in the region. ✓✓	(1 x 2) (2)
4.5.4	To address the spatial economic development challenges of the region. $\checkmark\checkmark$	(1 x 2) (2)
4.5.5	Revitalise the mining sector.  Stimulating the agricultural sector.  Industries that can offer future economic growth in the region.  Creation of employment opportunities for local people.  Increased buying power due to improved salaries.  Increases productivity of the region and GDP contribution.  Better standard of living (improves schools, medical facilities).  Skills development to improve earning potential.  Will reduce rural-urban migration through development of rural areas.   Local entrepreneurship encourages small business enterprise.  Small business development encourages local people to promote their arts and crafts to tourists.  Attract foreign investment in Platinum mining and allied industries in the region.  To generate linkages with the rest of the province.  Overloping the whole province and eventually the country.  (ANY FOUR)	(4 x 2) (8)

4.5

Interruption of electricity supply to avoid overload on the generating plant/ rolling black outs due to increased demand/power shut downs. ✓

 $(1 \times 1)(1)$ 

(Concept)

4.6.2 There is a greater demand than supply in the provision of electricity. ✓

Poor maintenance of existing power plants. ✓

Lack of planning. ✓

Limited natural resources used in the generation of electricity. ✓

(ANY ONE)

 $(1 \times 1) (1)$ 

4.6.3 (a) Domestic ✓  $(1 \times 1)(1)$ 

(b) They have a larger number of customers. ✓✓ More households have access to electricity. ✓✓ (ANY ONE)

 $(1 \times 2) (2)$ 

4.6.4 1.43 % 🗸

 $(1 \times 2) (2)$ 

### 4.6.5 Influence on small businesses

Negative impact on the business. ✓✓

If there is no electricity there won't be any production/lose business. 🗸 🗸

Workers will earn less income as business hours my be shortened. <

Goods can be damaged resulting in losses. ✓✓

Increase in prices to make up for deficit. </

Spend money on generators. ✓✓

Some businesses will flourish especially if they sell items like

batteries, candles/gass stoves/chargable lights/solar heating

systems. ✓ ✓

(ANY TWO)

 $(2 \times 2)(4)$ 

#### 4.6.6 Initiatives

Using electricity responsibly e.g. regulation of geyser, switch

lights off. ✓✓

Invest in solar power/gass stoves/ generators to reduce demand

on thermal electricity. ✓✓

Educate staff on sustainable use of electricity. <

(ANY TWO)

 $(2 \times 2) (4)$ 

[75]

To convert back to 75 divide learner mark by 73x75