



# basic education

Department:  
Basic Education  
**REPUBLIC OF SOUTH AFRICA**

## **NATIONAL SENIOR CERTIFICATE**

**GRADE 12**

**GEOGRAPHY P1**

**NOVEMBER 2017**

**MARKS: 225**

**TIME: 3 hours**

**This question paper consists of 13 pages and an 11-page annexure.**

## **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 between subsections of questions answered.
5. Start EACH question at the top of a NEW page.
6. Number the answers correctly according to the numbering system used in this question paper.
7. Number the answers in the centre of the line.
8. Do NOT write in the margins of the ANSWER BOOK.
9. Draw fully labelled diagrams when instructed to do so.
10. Answer in FULL SENTENCES, except where you have to state, name, identify or list.
11. Write neatly and legibly.

**SECTION A: CLIMATE, WEATHER AND GEOMORPHOLOGY**

Answer at least ONE question in this section. If you answer ONE question in SECTION A, you must answer TWO questions in SECTION B.

**QUESTION 1**

1.1 Choose a term in COLUMN B that matches the climatological description in COLUMN A. Write only the letter (A–I) next to the question number (1.1.1–1.1.8) in the ANSWER BOOK, for example 1.1.9 J.

COLUMN A		COLUMN B	
1.1.1	The inversion layer is higher than the plateau in this season	A	ridging
1.1.2	The temperature at which water vapour condenses	B	saddle
1.1.3	Pressure cell that causes clear and stable conditions over the interior of the country in winter	C	line thunderstorms
1.1.4	Forms when the cold front of a mid-latitude cyclone is cut off from the rest of the cyclone	D	Kalahari high
1.1.5	A weak low pressure associated with drizzle and unstable weather conditions along the South African coastline	E	cut-off low
1.1.6	Forms when warm, moist air from the Indian Ocean is undercut by cold, dry air from the Atlantic Ocean	F	summer
1.1.7	Indicated by elongated isobars from a high-pressure cell	G	coastal low
1.1.8	Zone of constant pressure between two anticyclones	H	dew point
		I	winter

(8 x 1) (8)

- 1.2 Study FIGURE 1.2 based on a river system.
- 1.2.1 Name the drainage pattern in the upper course of the river in area **A**.
  - 1.2.2 Name the underlying rock structure likely to be found in area **A**.
  - 1.2.3 Is area **A** the catchment area or the mouth of the river?
  - 1.2.4 State the type of erosion that causes deep valleys in area **A**.
  - 1.2.5 Name a natural feature that forms at a knick point (in area **B**).
  - 1.2.6 In which course of the river does deposition dominate?
  - 1.2.7 Name the landform that is likely to form from the sand deposits at the river mouth. (7 x 1) (7)
- 1.3 Refer to FIGURE 1.3 based on a cold front.
- 1.3.1 What evidence in the diagram indicates that **X** is a rapidly deepening low pressure? (1 x 1) (1)
  - 1.3.2 Describe the predicted change in temperature and air pressure that Cape Town will experience. (2 x 1) (2)
  - 1.3.3 Account for the cumulonimbus cloud that will form at **Y**. (1 x 2) (2)
  - 1.3.4 Why have beach-goers been warned to stay away from the beach? (2 x 2) (4)
  - 1.3.5 How can residents of the Cape coastal regions reduce the negative impact of the cold front? (2 x 2) (4)
- 1.4 FIGURE 1.4 shows the impact of berg winds on coastal temperatures.
- 1.4.1 (a) Give the lowest temperature recorded at Vredendal on 27 October. (1 x 1) (1)
  - (b) Give the exact time when this temperature was recorded. (1 x 1) (1)
  - 1.4.2 Give the highest temperature recorded on the graph. (1 x 1) (1)
  - 1.4.3 Determine the temperature range experienced at Vredendal on 27 October. (1 x 2) (2)
  - 1.4.4 Explain how the abnormally large temperature range experienced at Vredendal on 27 October was caused by berg winds. (2 x 2) (4)
  - 1.4.5 In a paragraph of approximately EIGHT lines, outline precautionary measures that the inhabitants of Vredendal should have in place in advance when a berg wind approaches. (4 x 2) (8)

- 1.5 Refer to FIGURE 1.5 based on the water table.
- 1.5.1 Define the term *water table*. (1 x 1) (1)
- 1.5.2 (a) Describe the position of the water table in FIGURE 1.5A in relation to the Earth's surface. (1 x 1) (1)
- (b) Account for the position of the water table in FIGURE 1.5A that was mentioned in QUESTION 1.5.2(a). (1 x 2) (2)
- 1.5.3 (a) How has urban development changed the position of the water table in relation to the Earth's surface in FIGURE 1.5B? (1 x 2) (2)
- (b) Explain why urban development changed the position of the water table in FIGURE 1.5B that was mentioned in QUESTION 1.5.3(a). (2 x 2) (4)
- 1.5.4 Suggest measures that can be introduced after urban development to maintain the water table as illustrated in FIGURE 1.5A. (2 x 2) (4)
- 1.6 Refer to FIGURE 1.6 showing a stream channel.
- 1.6.1 Identify the stream channel pattern shown in FIGURE 1.6. (1 x 1) (1)
- 1.6.2 In which course of the river is the illustrated stream channel pattern most likely to be found? (1 x 1) (1)
- 1.6.3 Give ONE reason why the illustrated stream channel pattern will develop in the course of the river named in QUESTION 1.6.2. (1 x 2) (2)
- 1.6.4 Draw a simple, labelled cross-section of the meander between points **A** and **B**. (2 x 2) (4)
- 1.6.5 You would like to develop a campsite along the banks of the illustrated river. After careful consideration, you choose a site along slope/bank **A** rather than along slope/bank **B**. In a paragraph of approximately EIGHT lines, explain why the site along slope/bank **A** is the better choice. (4 x 2) (8)
- [75]**

**QUESTION 2**

2.1 Refer to FIGURE 2.1 that displays four weather stations. Match the statements below with weather stations **A** to **D**. Write only the letter (A–D) next to the question number (2.1.1–2.1.7) in the ANSWER BOOK, for example 2.1.8 A.

2.1.1 Thunderstorms are likely to be experienced.

2.1.2 Wind speed is 25 knots.

2.1.3 Indicates clear skies.

2.1.4 Wind direction is south-westerly.

2.1.5 Associated with stable conditions over the interior in winter.

2.1.6 Conditions that prevail on the west coast of South Africa in winter.

2.1.7 The expected precipitation is drizzle. (7 x 1) (7)

2.2 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 number (2.2.1–2.2.8) in the ANSWER BOOK, for example 2.2.9 A.

2.2.1 Refers to the main river and its tributaries:

- A Drainage basin
- B Confluence
- C Catchment area
- D River system

2.2.2 The flow of water in a mountainous stream is likely to be ...

- A laminar.
- B smooth.
- C turbulent.
- D layered.

2.2.3 The main geomorphological process in the lower course of a river is ...

- A erosion.
- B deposition.
- C saltation.
- D abstraction.

2.2.4 The lowest point to which a river can erode is called the ...

- A permanent base level.
- B source.
- C temporary base level.
- D knickpoint.

2.2.5 The term used to describe the changing position of a watershed:

- A River capture
- B Rejuvenation
- C Deposition
- D Abstraction

2.2.6 A stream that is now too small to have eroded the valley in which it flows:

- A Antecedent stream
- B Captured stream
- C Superimposed stream
- D Misfit stream

2.2.7 Forms when a stream deposits its load and blocks its own path:

- A Braided stream
- B Levee
- C Flood plain
- D Marsh

2.2.8 Rivers that only flow in the rainy season are called ... rivers.

- A exotic
  - B periodic
  - C episodic
  - D perennial
- (8 x 1) (8)

2.3 Study FIGURE 2.3 that contains information about a typhoon in Taiwan.

2.3.1 Which sketch, **A** or **B**, shows the typhoon that struck Taiwan? (1 x 1) (1)

2.3.2 Give ONE reason for your answer to QUESTION 2.3.1. (1 x 2) (2)

2.3.3 What evidence suggests that Taiwan experiences typhoons regularly? (1 x 2) (2)

2.3.4 Why are people moved to safety at the approach of a typhoon? (1 x 2) (2)

2.3.5 Explain TWO factors that would have led to Meranti developing into a super (extremely strong) typhoon. (2 x 2) (4)

2.3.6 Evaluate the impact of 800 mm of rain being dumped (falling in large amounts) in the mountainous areas of Taiwan. (2 x 2) (4)

- 2.4 FIGURE 2.4 is a representation of a city's climate.
- 2.4.1 Which sketch, **A** or **B**, represents the daytime city climate? (1 x 1) (1)
- 2.4.2 Give ONE reason to support your answer to QUESTION 2.4.1. (1 x 2) (2)
- 2.4.3 Give ONE reason for the occurrence of smog in sketch **B**. (1 x 2) (2)
- 2.4.4 Suggest ONE reason for the absence of smog in sketch **A**. (1 x 2) (2)
- 2.4.5 In a paragraph of approximately EIGHT lines, discuss various sustainable solutions to limit the formation of smog in a city. (4 x 2) (8)
- 2.5 Refer to FIGURE 2.5 that shows river capture on a superimposed landscape.
- 2.5.1 What is a *superimposed stream*? (1 x 1) (1)
- 2.5.2 What evidence suggests that river **S** and river **Y** are superimposed streams? (1 x 2) (2)
- 2.5.3 Draw a labelled cross-section to show how the abstraction process resulted in river capture in FIGURE 2.5B. (2 x 2) (4)
- 2.5.4 In a paragraph of approximately EIGHT lines, explain the changes that the captured stream will undergo downstream of the elbow of capture. (4 x 2) (8)
- 2.6 Study FIGURE 2.6 based on river rejuvenation in the lower course of a river.
- 2.6.1 State ONE characteristic of a rejuvenated river. (1 x 1) (1)
- 2.6.2 What evidence in the sketch indicates that the river has been rejuvenated? (2 x 1) (2)
- 2.6.3 Give TWO possible causes of river rejuvenation. (2 x 2) (4)
- 2.6.4 Describe the impact that rejuvenation will have on the meander in FIGURE 2.6. (1 x 2) (2)
- 2.6.5 Suggest ONE negative impact of rejuvenation on the future development of infrastructure. (1 x 2) (2)
- 2.6.6 Give evidence in FIGURE 2.6 to support the statement that terraces, even though they are flat, are not always suitable for farming. (2 x 2) (4)
- [75]**



**SECTION B: RURAL AND URBAN SETTLEMENTS AND SOUTH AFRICAN ECONOMIC GEOGRAPHY**

Answer at least ONE question in this section. If you answer ONE question in SECTION B, you must answer TWO questions in SECTION A.

**QUESTION 3**

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 x 1) (7)

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 **B**.
- 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 Asian markets?
- 3.2.7 Does area **A** or **B** experience rainfall mainly in winter?
- 3.2.8 Is area **A** or **B** the second largest industrial area in South Africa? (8 x 1) (8)

- 3.3 Study FIGURE 3.3 showing urban land-use.
- 3.3.1 Define the term *urban land-use*. (1 x 1) (1)
- 3.3.2 Name land-use zone **A**. (1 x 1) (1)
- 3.3.3 What evidence indicates that land-use zone **A** has a high degree of accessibility? (1 x 2) (2)
- 3.3.4 Discuss TWO problems that land-use zone **A** experiences due to its high accessibility. (2 x 2) (4)
- 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 **A** experiences as a result of its accessibility. (4 x 2) (8)
- 3.4 Refer to FIGURE 3.4, an extract based on urban blight, which is an urban issue related to rapid urbanisation.
- 3.4.1 What do you understand by the term *urban blight*? (1 x 1) (1)
- 3.4.2 State ONE cause of urban blight. (1 x 1) (1)
- 3.4.3 Why have the inhabitants of 120–128 Bromwell Street not vacated (left) their homes yet? (1 x 2) (2)
- 3.4.4 Why do residents feel that urban renewal of the Woodstock Hub is destroying their lives? (1 x 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 Street from a low- to a middle- or a high-income residential area. (2 x 2) (4)
- 3.5 Refer to FIGURE 3.5 based on industrial development zones (IDZ), which create opportunities for industrial decentralisation.
- 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 core industrial regions in South Africa. (2 x 2) (4)
- 3.5.5 Explain how an IDZ will improve local socio-economic conditions. (2 x 2) (4)

- 3.6 FIGURE 3.6 is a table showing South Africa's position on the global food security index.
- 3.6.1 Describe the change in South Africa's food security index score from 2012 to 2016. (1 x 1) (1)
  - 3.6.2 State the change in South Africa's world ranking in terms of the food security index from 2012 to 2016. (1 x 1) (1)
  - 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 South Africa. (2 x 2) (4)
  - 3.6.5 Write a paragraph of approximately EIGHT lines in which you analyse the reasons for South Africa's low food security index. (4 x 2) (8)
- [75]**

#### QUESTION 4

- 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 x 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	A	urban agriculture
4.2.2	Type of farming where every available piece of land is cultivated	B	labour intensive
4.2.3	Crops grown in residential areas	C	large-scale farming
4.2.4	Farms that depend heavily on manual labour	D	monoculture
4.2.5	Farms that depend heavily on manual labour	E	intensive farming
4.2.6	Products manufactured for sale to other countries	F	export market
4.2.7	Products sold within South Africa	G	home market
4.2.7	Farming that grows one product (crop)	H	import market

(7 x 1) (7)

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

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

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

- 4.4.1 Name the push factor in the cartoon that caused rural-urban migration. (1 x 1) (1)
- 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 surprised by John's attraction to the city? (1 x 1) (1)
- 4.4.4 State TWO other expectations John had that were NOT met when he moved to the city. (2 x 2) (4)
- 4.4.5 Local government (municipalities) must increase their yearly budgets to provide for an influx of rural migrants. Explain this statement in a paragraph of approximately EIGHT lines. (4 x 2) (8)
- 4.5 Read the extract in FIGURE 4.5 referring to the development of the Dube Trade Port, which is said to boost the development of the Durban-Pinetown industrial region.
- 4.5.1 In which province is the Durban-Pinetown industrial region located? (1 x 1) (1)
- 4.5.2 What, according to President Jacob Zuma, played an important role in developing the Dube Trade Port? (1 x 1) (1)
- 4.5.3 Name any TWO major industrial products produced in the Durban-Pinetown industrial region that may benefit from the development of the Dube Trade Port. (2 x 1) (2)
- 4.5.4 Excluding coastal location, discuss any TWO factors that favoured the development of the Durban-Pinetown industrial region. (2 x 2) (4)
- 4.5.5 In a paragraph of approximately EIGHT lines, outline the importance of launching the agriculture zone and cargo terminal for future industrial development in the Durban-Pinetown industrial region. (4 x 2) (8)
- 4.6 Study FIGURE 4.6 showing the percentage of Gauteng's activities in the tertiary sector in South Africa.
- 4.6.1 Define the term *tertiary economic activities*. (1 x 1) (1)
- 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 highest percentage to the tertiary sector. (1 x 2) (2)
- 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 sector than a primary sector? (2 x 2) (4)
- 4.6.6 Explain the role that transport plays in strengthening the tertiary sector in Gauteng. (2 x 2) (4)

[75]

**GRAND TOTAL: 225**



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**GRADE 12**

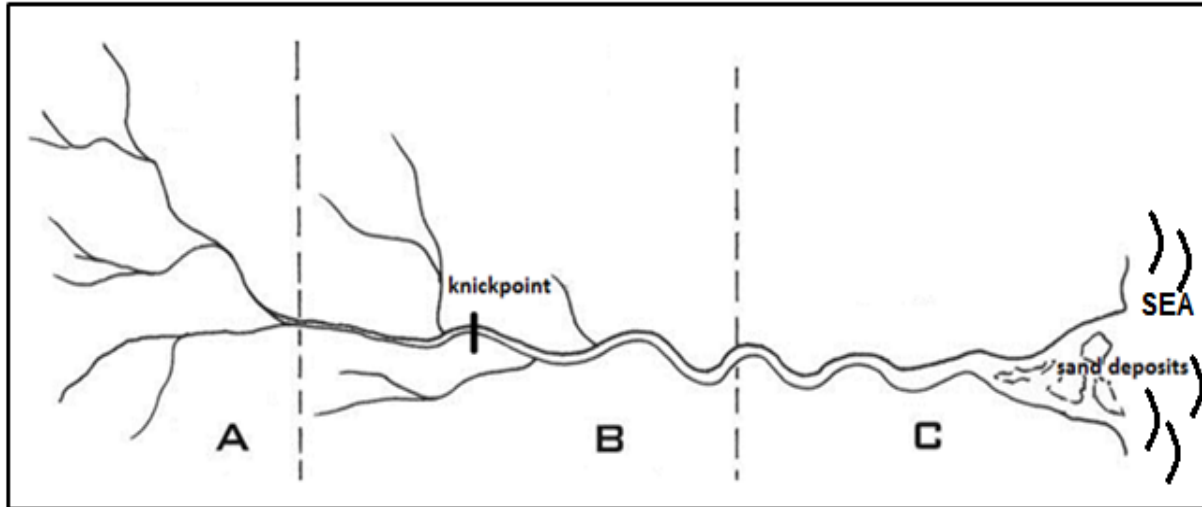
**GEOGRAPHY P1**

**NOVEMBER 2017**

**ANNEXURE**

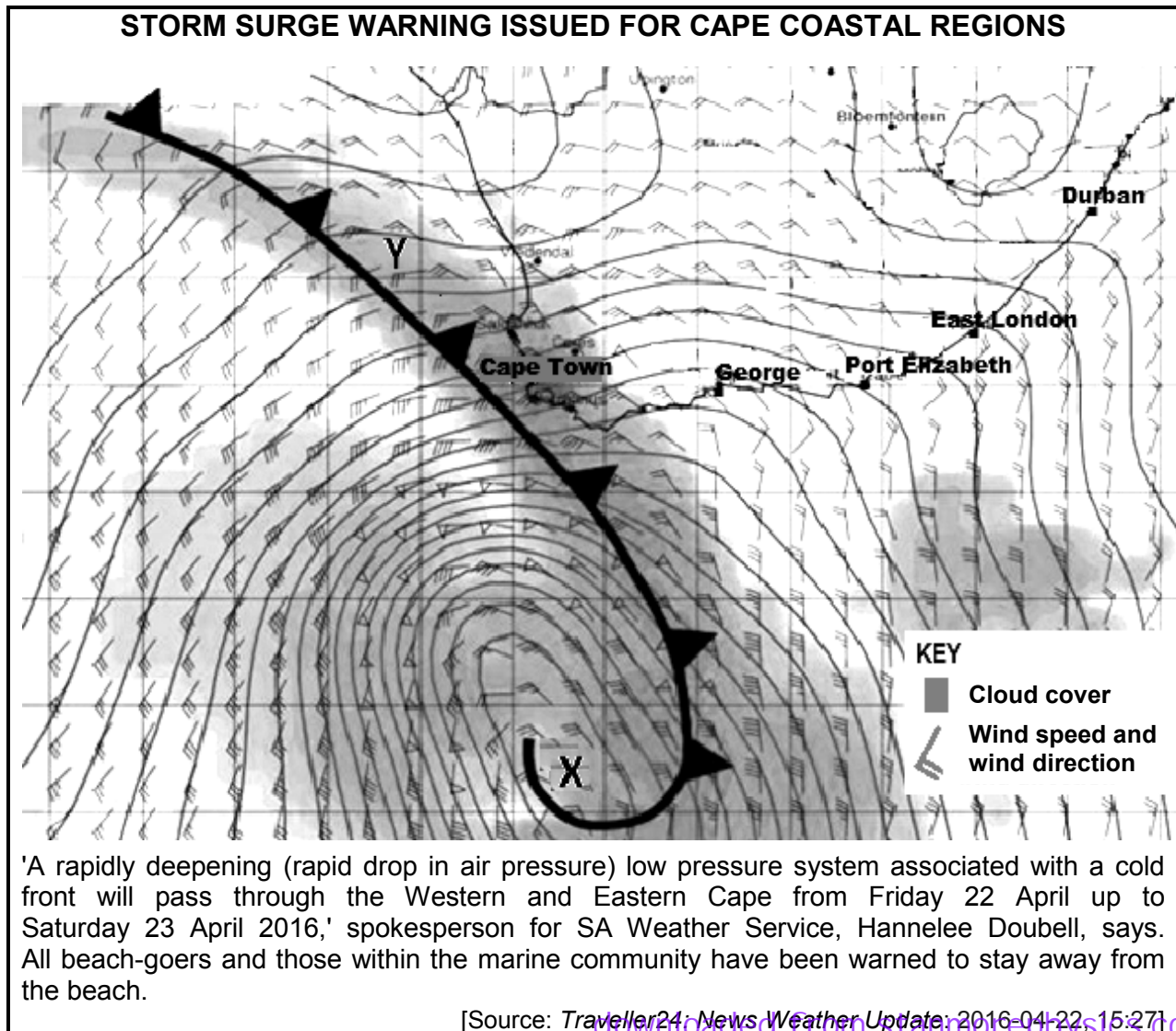
**This annexure consists of 11 pages.**

FIGURE 1.2: RIVER SYSTEM

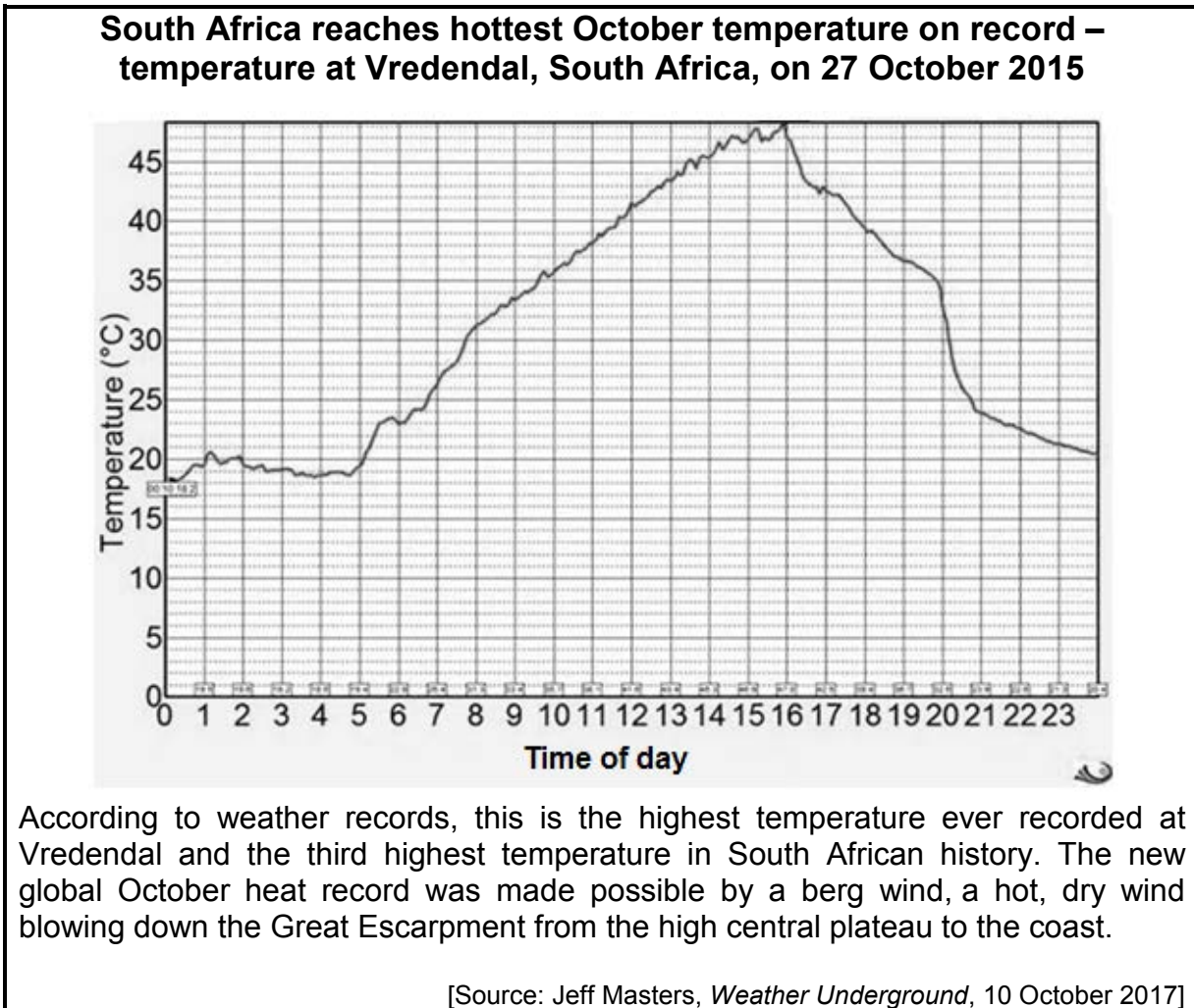


[Adapted from <https://za.pinterest.com/pin/430516045604913515/>]

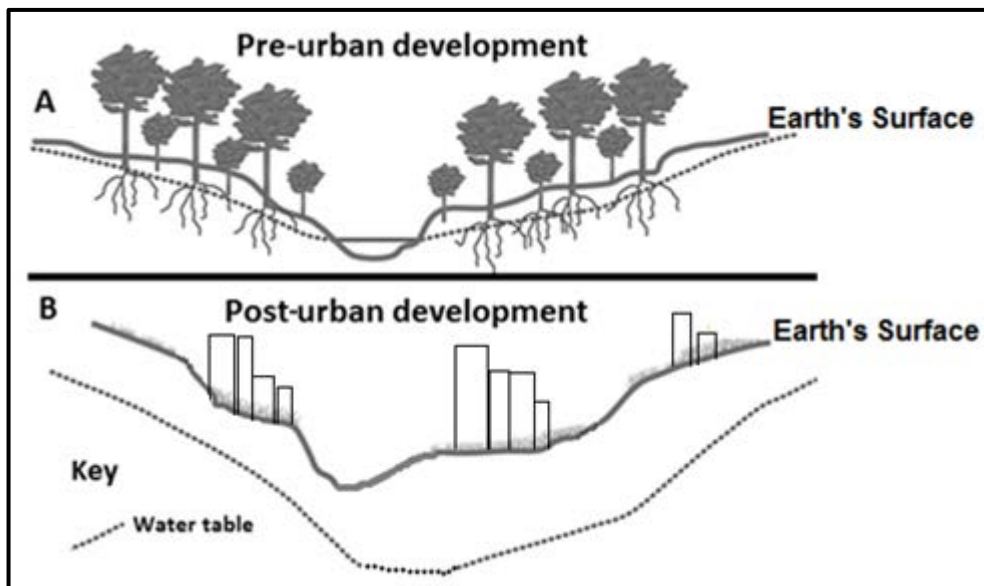
FIGURE 1.3: COLD FRONT



**FIGURE 1.4: IMPACT OF BERG WINDS ON COASTAL TEMPERATURES**



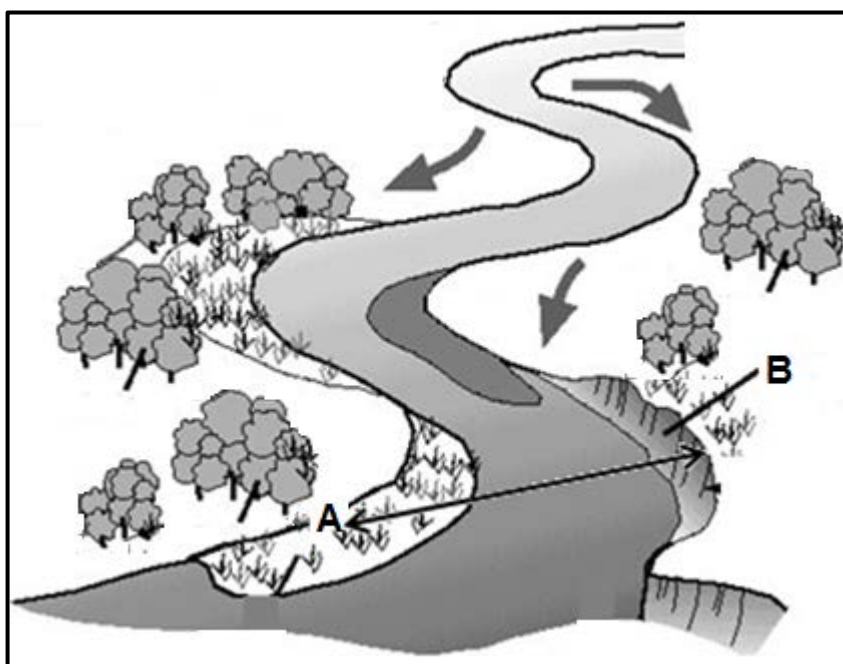
**FIGURE 1.5: WATER TABLE**



[Adapted from <http://www.learnnc.org/lp/media/uploads/2010/02/fig3-21.jpg>]

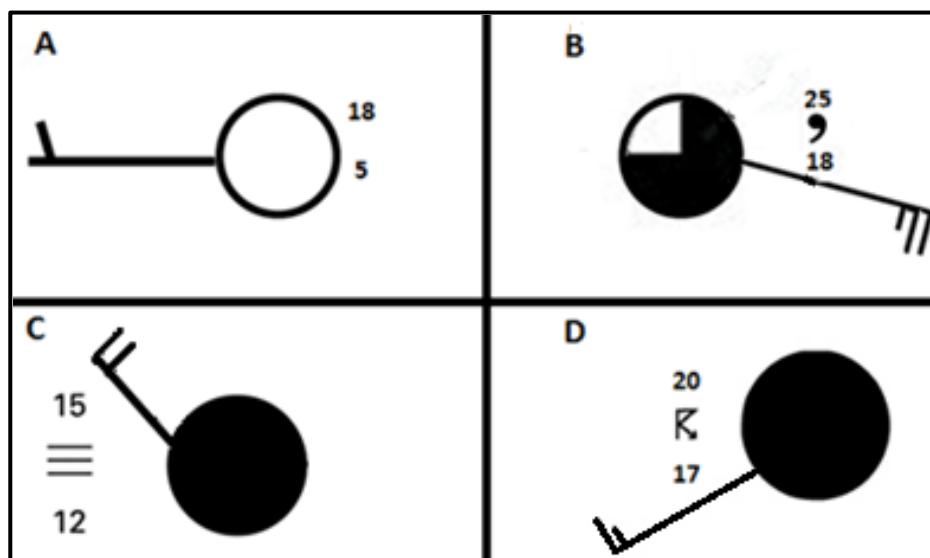


FIGURE 1.6: STREAM CHANNEL



[Source: <http://adlib.everysite.co.uk/adlib/defra/content.aspx?id=000IL3890W.17UT30ZOH8G447>]

FIGURE 2.1: WEATHER STATIONS

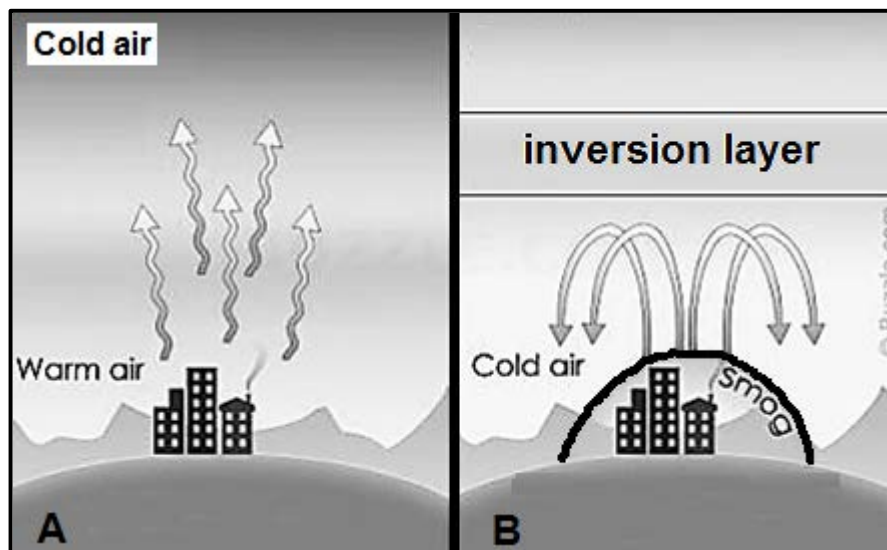


[Source: South African Weather Service]

**FIGURE 2.3: TYPHOON IN TAIWAN**

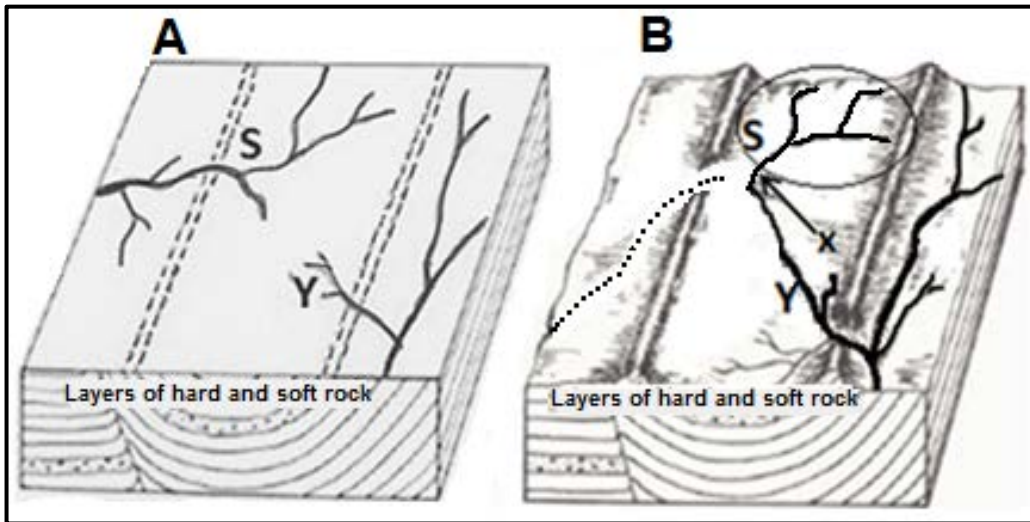
<p>Direction of movement</p> <p>Equator</p> <p>Direction of movement</p> <p><b>A</b></p> <p><b>B</b></p>	<p align="center"><b>STRONGEST TYPHOON IN 21 YEARS HITS TAIWAN</b></p> <p>Parts of Taiwan came to a standstill as super typhoon Meranti brought the strongest winds in 21 years.</p> <p>There were severe travel disruptions for the Mid-Autumn Festival long weekend, as over 300 domestic and international flights were cancelled and trains running along the east coast were halted.</p> <p>The storm was forecast to have dumped as much as 800 mm of rain in mountainous areas. Close to 1 500 people were evacuated from at-risk areas, with about half placed in temporary shelters.</p> <p align="right">[Adapted from AFP, 15 September 2016]</p>
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**FIGURE 2.4: CITY CLIMATE**



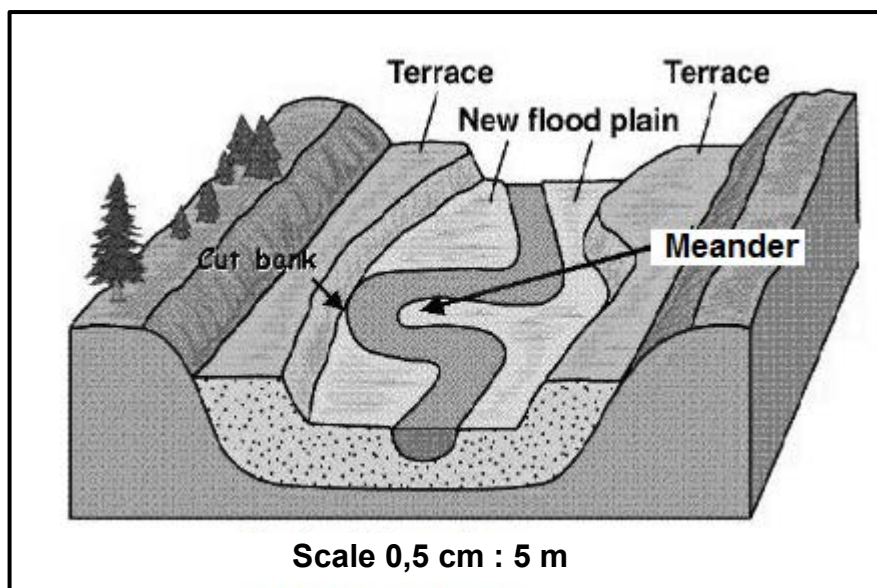
[Adapted from <http://www.buzzle.com/articles/causes-and-effects-of-temperature-inversion.html>]

**FIGURE 2.5: RIVER CAPTURE**



[Adapted from [www.uky.edu](http://www.uky.edu)]

**FIGURE 2.6: RIVER REJUVENATION**



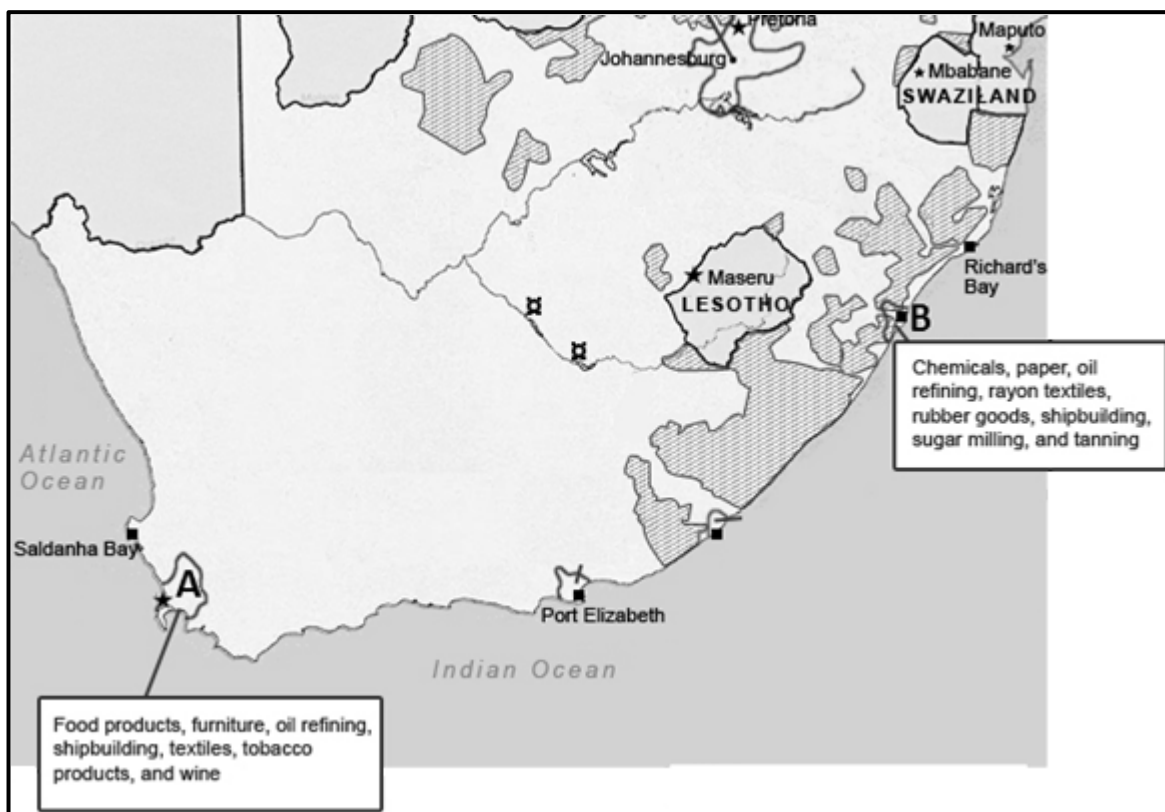
[Adapted from [www.studyblue.com](http://www.studyblue.com)]

**FIGURE 3.1: SETTLEMENT TYPES**



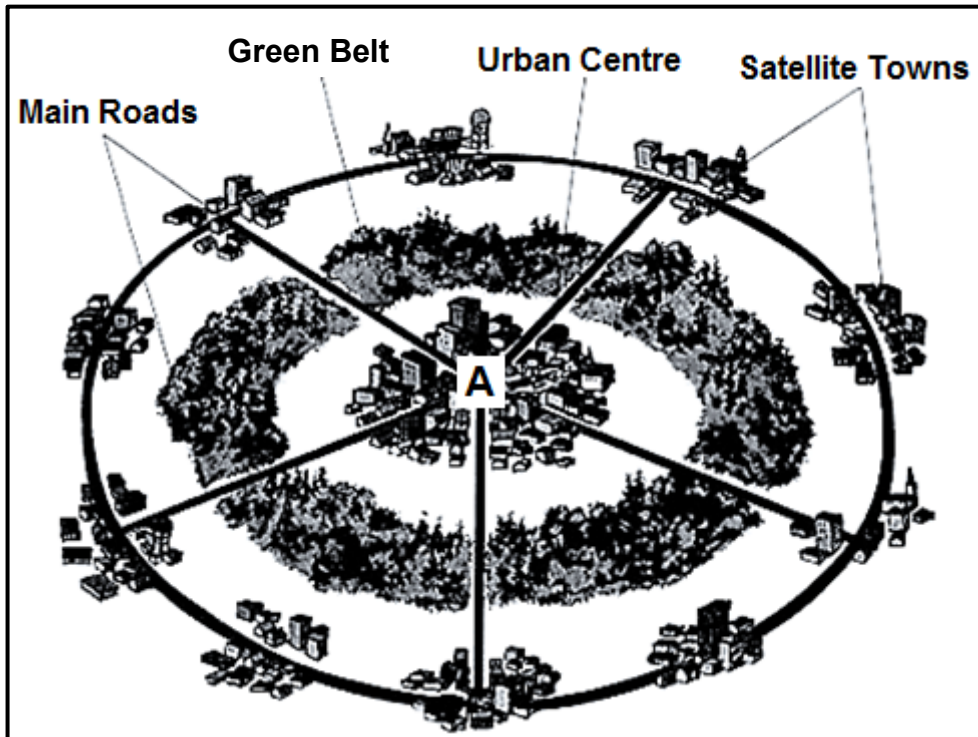
[Source: [http://images.slideplayer.com/24/7567712/slides/slide\\_6.jpg](http://images.slideplayer.com/24/7567712/slides/slide_6.jpg)]

**FIGURE 3.2: CORE INDUSTRIAL AREAS**



[Source: [www.keyword-suggestions.com](http://www.keyword-suggestions.com)]

**FIGURE 3.3: URBAN LAND-USE**



[Source: <http://www2.mcdaniel.edu/Biology/ESP/cities/urbanquestions.html>]

**FIGURE 3.4: URBAN BLIGHT**

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

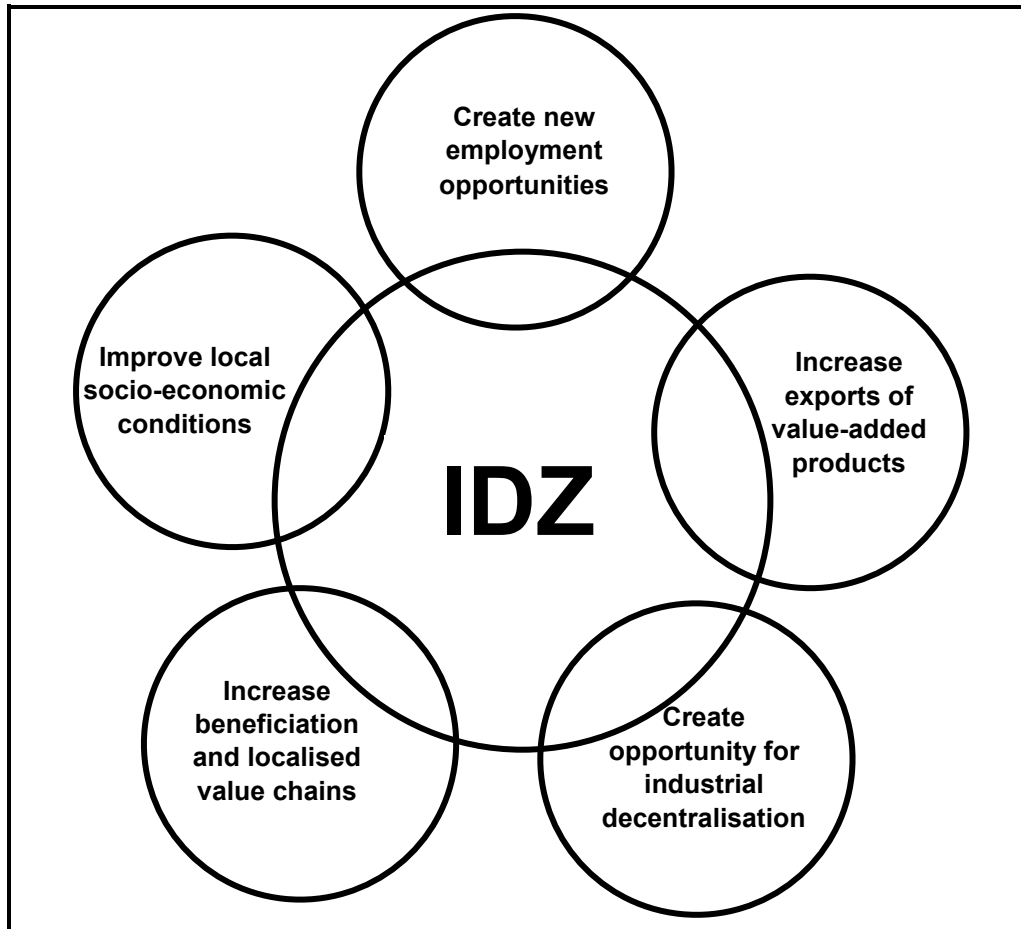
The deadline for Bromwell Street residents in Woodstock, Cape Town, to leave their homes has been extended. One of the residents says urban renewal programmes are destroying their lives in Woodstock and Salt River.

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>]

**FIGURE 3.5: INDUSTRIAL DEVELOPMENT ZONES**



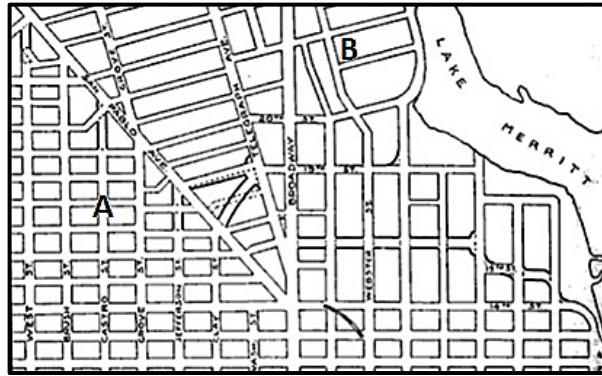
[Source: Examiner's notes]

**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				GDP US\$ 2016
	2012 Score	2012 Ranking	2016 Score	2016 Ranking	
South Africa	61,7	40	62,9	47	13 481

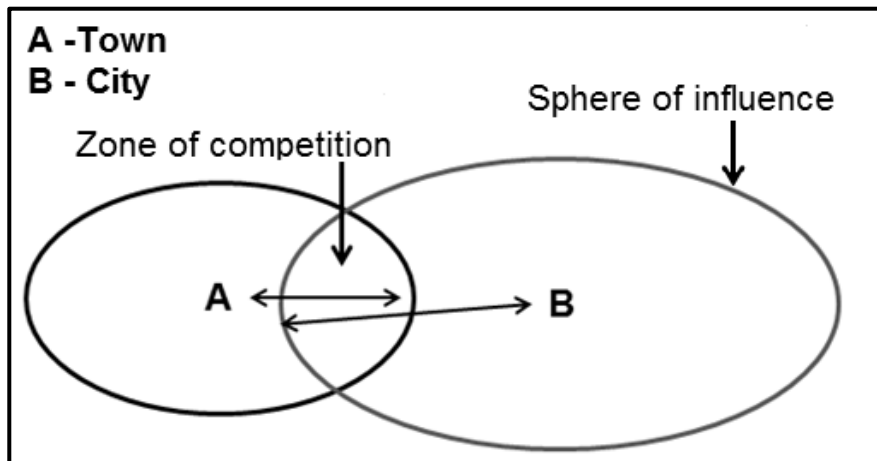
[Source: Economist Intelligent Unit (EIU) Report, 2016 GFSI Edition]

FIGURE 4.1: STREET PATTERNS



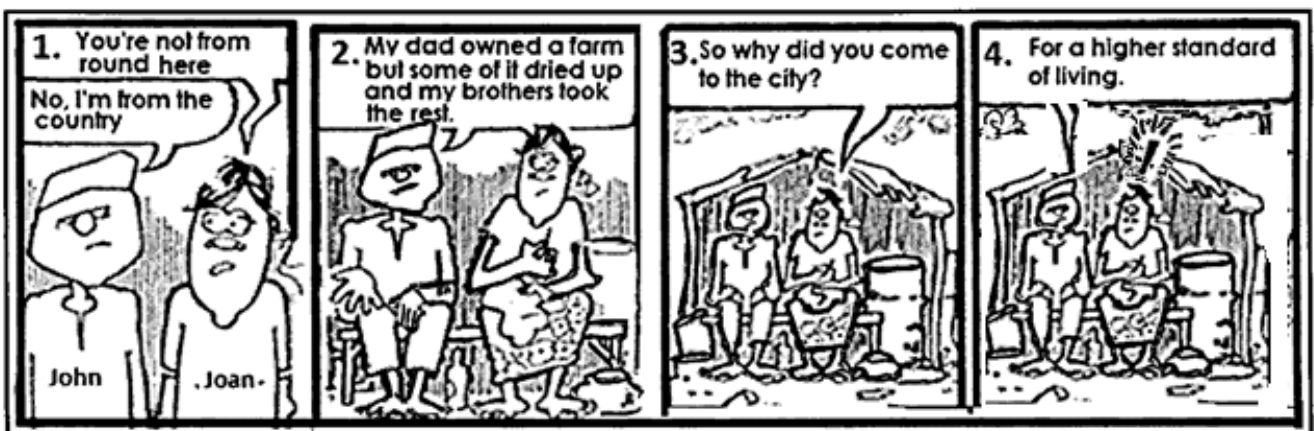
[Source: www.planetizen.com]

FIGURE 4.3: SPHERE OF INFLUENCE



[Source: Examiner's sketch]

FIGURE 4.4: RURAL-URBAN MIGRATION



[Adapted from OCR 2014]

**FIGURE 4.5: DUBE TRADE PORT: INFLUENCE ON THE DURBAN-PINETOWN INDUSTRIAL REGION**

**TRADE PORT A MAJOR BOOST FOR ECONOMIC GROWTH**

**'The Dube Trade Port is set to be a major logistics platform for Southern Africa, as the Port of Durban provides connectivity to 53 international destinations and access to local distribution networks,' said President Jacob Zuma.**

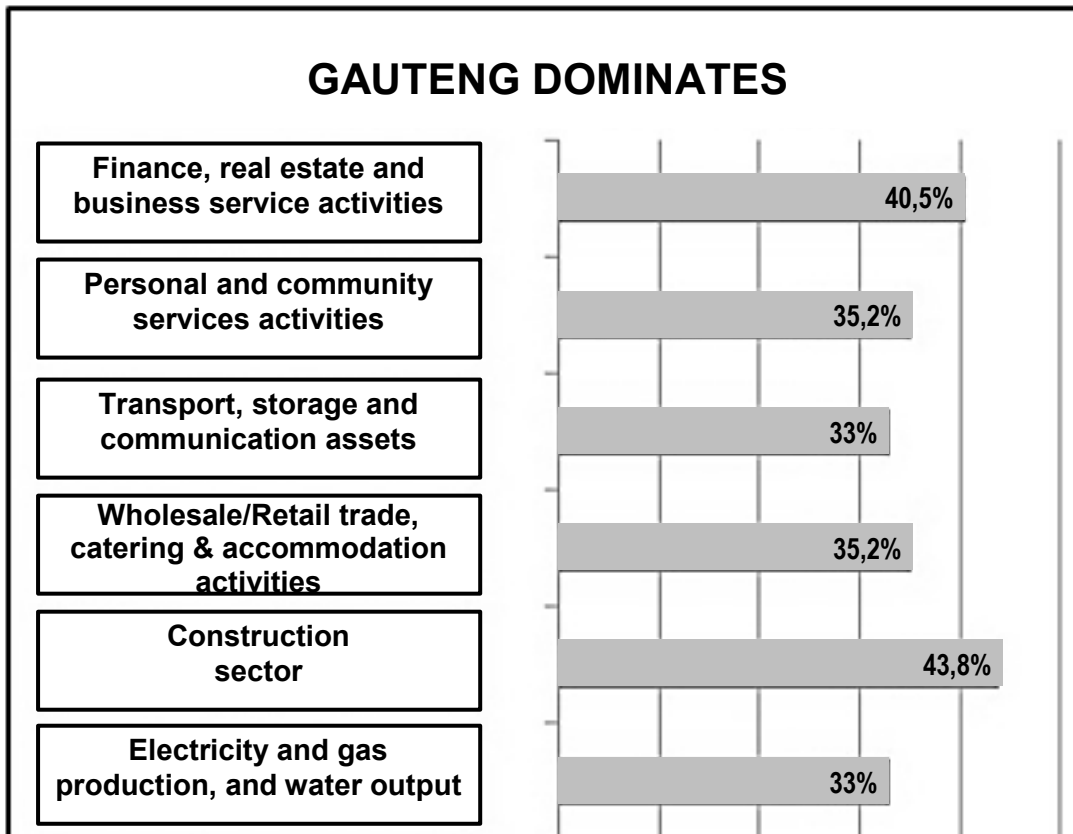
The President launched the state-of-the-art (very modern) multibillion rand cargo terminal, trade zone, agriculture zone (the largest climate-controlled glass-covered growing area in Africa) and IT and telecommunication platform at La Mercy, KwaZulu-Natal.

Located between the two largest seaports in the Southern Hemisphere, Durban and Richards Bay, the Dube Trade Port has huge potential to boost economic growth and job creation in the province.

KwaZulu-Natal premier, Zweli Mkhize, also speaking at the launch, said the Dube Trade Port would greatly expand the province's import and export capacity.

[Adapted from <http://www.vukuzenzele.gov.za/book/export/html/962>]

**FIGURE 4.6: TERTIARY ACTIVITIES**



[Source: <http://www.fin24.com/Entrepreneurs/News/Gauteng-the-top-dog-for-years-to-come-20140703>]





# basic education

Department:  
Basic Education  
**REPUBLIC OF SOUTH AFRICA**

## **NATIONAL SENIOR CERTIFICATE**

**GRADE 12**

**GEOGRAPHY P1**

**NOVEMBER 2017**

**MARKING GUIDELINES**

**MARKS: 225**

**These marking guidelines consist of 22 pages.**

## SECTION A: CLIMATE, WEATHER AND GEOMORPHOLOGY

### QUESTION 1

- 1.1 1.1.1 F/Summer (1)
- 1.1.2 H/Dew point (1)
- 1.1.3 D/Kalahari High (1)
- 1.1.4 E/Cut-off-low (1)
- 1.1.5 G/Coastal low (1)
- 1.1.6 C/Line thunderstorms (1)
- 1.1.7 A/Ridging (1)
- 1.1.8 B/Saddle (1) (8 x 1) (8)
- 1.2 1.2.1 Dendritic (1)
- 1.2.2 Homogenous geology/Uniformly horizontal (1)  
Rocks of uniform resistance to erosion (1)  
Horizontal sedimentary/Massive igneous (1)  
[ANY ONE]
- 1.2.3 Catchment (1)
- 1.2.4 Vertical/Downward/Down cutting (1)
- 1.2.5 Rapid (1)  
Waterfall (1)  
[ANY ONE]
- 1.2.6 Lower Course/Reaches (1)  
Old age stage (1)  
Plain Stage (1)  
Stage C (1)  
[ANY ONE]
- 1.2.7 Sand islands/Sand banks (1)  
Delta (1)  
[ANY ONE] (7 x 1) (7)

- 1.3 1.3.1 Isobars closely spaced together (1)  
 Steep pressure gradient (1)  
 Station models show high wind speed (1)  
 [ANY ONE] (1 x 1) (1)
- 1.3.2 Temperatures will decrease/drop (1)  
 Air pressure will increase/rise (1) (2 x 1) (2)
- 1.3.3 Cold air undercuts the warm air, forcing it to rise rapidly and (very) high (2)  
 Steep gradient of the cold front forces warm air to rise (very) high (2)  
 [ANY ONE] (1 x 2) (2)
- 1.3.4 Storm surges/high waves will make the sea rough/dangerous (2)  
 Coastal flooding is likely to occur (2)  
 Possibility of sandstorms (2)  
 Strong winds (2)  
 Possibility of thunder and lightning/hail (2)  
 Heavy rain (2)  
 Strong possibility of injury OR loss of life for people (2)  
 [ANY TWO] (2 x 2) (4)
- 1.3.5 Residents should stay indoors/delay travelling/seek shelter (2)  
 People living in low-lying areas should vacate their homes and seek shelter on higher ground (2)  
 NGOs and shelters can provide homeless people with shelter/blankets (2)  
 People can stock up on food/water/candles (2)  
 Stock up on medical supplies (2)  
 People engaged in livestock farming make provisions to shelter livestock (2)  
 Secure belongings/property (2)  
 Boarding up windows (2)  
 Placing sandbags (2)  
 Maintenance of electricity connections (2)  
 Maintain drainage systems (2)  
 Secure boats and vessels in harbours (2)  
 Listen to media broadcasts to prepare for storm (2)  
 Having generators on standby (2)  
 Evacuation plans in place (2)  
 [ANY TWO] (2 x 2) (4)
- 1.4 1.4.1 (a) 18°C (1)  
 [Unit must be indicated] (1 x 1) (1)
- (b) 24h00/0h00/12 midnight – 00h30/30 minutes past midnight (1)  
 (1 x 1) (1)
- 1.4.2 48°C (1)  
 [Unit must be indicated] (1 x 1) (1)
- 1.4.3 30°C (2) (48°C - 18°C)  
 [Unit must be indicated] (1 x 2) (2)

- 1.4.4 With the onset of the bergwind, temperatures are still low (2),  
 From 5am the temperatures rise with the bergwind reaching Vredendal (2)  
 Descending air warms up (2)  
 The air warms up at the dry adiabatic lapse rate/1°C per 100m through  
 subsidence (2)  
 [ANY TWO] (2 x 2) (4)

1.4.5 **PRECAUTIONARY MEASURES**

- Fire fighters/emergency services are deployed earlier/on standby in the  
 fields to detect fires (2)  
 Inhabitants should have fire extinguishers nearby (2)  
 Prepare firebreaks/controlled fires (2)  
 Construct lookout towers (2)  
 Earlier warning (TV, radio, newspapers) provides time for inhabitants to  
 secure liquids in preparation for dehydration to humans due to the increased  
 temperatures (2)  
 Farmers are able to fill watering points to ensure hydration of livestock (2)  
 Farmers are able to place crop covers to reduce the impact of increased  
 evaporation rates and prevent damage to crops (2)  
 Irrigate fields to keep vegetation wet (2)  
 Move livestock to shaded areas (2)  
 Move livestock to protected areas (2)  
 Protect fodder reserves (2)  
 Planned operation of emergency services that will be required for inhabitants  
 who may be susceptible to heat strokes and heat disorders (2)  
 Advise vulnerable people (elderly, young) to stay indoors (2)  
 Cancel outdoor activities (2)  
 Evacuation plans can be put in place (2)  
 Take out insurance (2)  
 [ANY FOUR] (4 x 2) (8)

- 1.5 1.5.1 The water table is the surface of the crust water zone (1)  
 The water table is the upper limit/layer of the saturated ground water zone  
 (1)  
 [CONCEPT]  
 [ANY ONE] (1 x 1) (1)

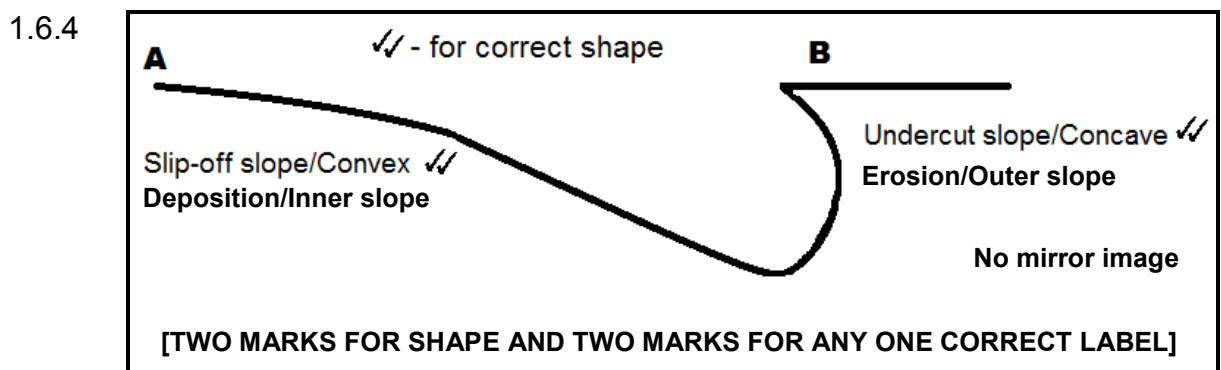
- 1.5.2 (a) In A the water table is: close to the surface/high (1)  
 Only a few metres beneath the surface/close to the surface (1)  
 Cuts the surface/riverbed (1)  
 [ANY ONE] (1 x 1) (1)

- (b) The vegetation traps water/reduces run-off (2)  
 Vegetation allows infiltration to occur (2)  
 Trees create shade, thus less evaporation (2)  
 Permeable underlying rock promotes infiltration (2)  
 Gentle gradient promotes infiltration (2)  
 As infiltration increases so will the water table rise (2)  
 No artificial surfaces (2)  
 [ANY ONE] (1 x 2) (2)

- 1.5.3 (a) The water table has lowered/is deeper/is further below the surface (2)  
 No longer intersects the earth's surface/riverbed (2)  
 [ANY ONE] (1 x 2) (2)
- (b) Artificial (human-made) surfaces e.g. concrete are less permeable and result in direct run-off (2)  
 Drainage systems (storm water drains) carry run-off out of the settlement (2)  
 Removal of trees and natural vegetation increases direct run-off (2)  
 Less infiltration due to more run-off reduces the groundwater content and lowers the water table (2)  
 Industrial/human activities reduces the water table (2)  
 [ANY TWO] (2 x 2) (4)

- 1.5.4 Create more permeable surfaces like cobble and grass (2)  
 Limit channelisation of river to allow water to continue to infiltrate (2)  
 Use permeable bricks to build walkways and pavements (2)  
 Create buffer zones closer to the river to protect the vegetation for infiltration purposes (2)  
 Create more open spaces within the urban environment e.g. green belts that have natural surfaces to increase rates of infiltration (2)  
 Prepare more vegetated environments between buildings e.g. trees and open grass areas that will promote infiltration/afforestation (2)  
 Reduce urban development on flat surfaces so greater infiltration will be promoted there (2)  
 Develop drainage systems that channel treated water back onto open natural environments in the city to increase rates of infiltration (2)  
 Create urban environments with drainage systems that capture direct run-off/rainfall into storm water systems and channel run-off into natural environments in the city (2)  
 [ANY TWO] (2 x 2) (4)

- 1.6 1.6.1 Meandering (1) (1 x 1) (1)
- 1.6.2 Lower/Plain/Middle (1 x 1) (1)
- 1.6.3 Gradient is more gentle (2)  
 Reduced energy/velocity (2) (1 x 2) (2)



downloaded from stanmorephysics.com (2 x 2) (4)

1.6.5 **SLOPE A – MOST SUITABLE FOR THE CAMPSITE**

- Has a gentle convex shape (2)
- Gentle slope ideal for building and camping (2)
- Easy access to river for fishing or collecting water (2)
- Flow rate is lower and therefore safer (2)
- Over time deposition will allow the campsite to increase in size (2)
- Easier to launch small boats and canoes (2)
- It creates a shallow point to access the river (2)
- Soil is fertile therefore more vegetation (2)
- More trees for shade (2)

**SLOPE B**

- Constant erosion/undercutting results in concave/steep slope (2)
- Undercutting leads to the formation of a river cliff which is unstable (2)
- The position of camp sites will retreat and cause facilities to be damaged (2)
- Reduced access to water (2)
- Faster flowing water will be more dangerous (2)

[ANY FOUR]

(4 x 2) (8)

**[75]**

**QUESTION 2**

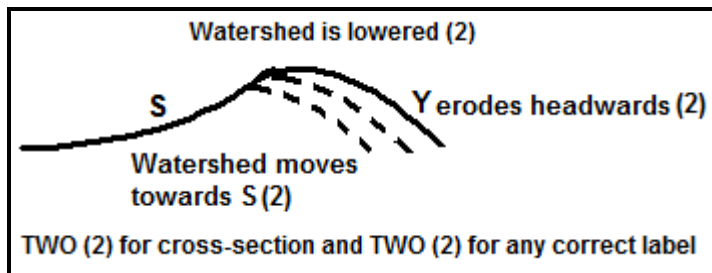
- 2.1 2.1.1 D (1)
- 2.1.2 B (1)
- 2.1.3 A (1)
- 2.1.4 D (1)
- 2.1.5 A (1)
- 2.1.6 C (1)
- 2.1.7 B (1) (7 x 1) (7)
- 2.2 2.2.1 D/River system (1)
- 2.2.2 C/turbulent (1)
- 2.2.3 B/deposition (1)
- 2.2.4 A/permanent base level (1)
- 2.2.5 D/Abstraction (1)
- 2.2.6 D/Misfit stream (1)
- 2.2.7 A/Braided stream (1)
- 2.2.8 B/periodic (1) (8 x 1) (8)
- 2.3 2.3.1 A (1) (1 x 1) (1)
- 2.3.2 Air circulates in an anticlockwise (in the Northern Hemisphere) (2)  
Direction of movement is North West (2)  
Taiwan is in the Northern Hemisphere/North of the Equator (2)  
[ANY ONE] (1 x 2) (2)
- 2.3.3 The name of this typhoon is Meranti (the 13<sup>th</sup> typhoon that season) (2)  
(1 x 2) (2)
- 2.3.4 Storm surges cause coastal flooding (2)  
Along the coastline which puts people's lives at risk/prevents loss of lives (2)  
Heavy down pours of rain will result in flooding (2)  
Low-lying areas most prone to flooding which puts peoples' lives at risk (2)  
Minimises damage and injuries (2)  
These are destructive storms associated with strong winds (2)  
Strong winds cause flying debris (2)  
[ANY ONE] (1 x 2) (2)

- 2.3.5 Development of a steeper pressure gradient (2)  
 Stronger or higher wind speeds (2)  
 High sea surface temperatures will increase upliftment and cooling of air (2)  
 Increased latent heating as condensation increases which provides more energy for the typhoon (2)  
 Continuous large supply of moisture (2)  
 Rapid rising of warm moist air intensifies the low pressure centre (2)  
 Intense atmospheric instability (2)  
 Increase in upper air divergence (2)  
 [ANY TWO] (2 x 2) (4)
- 2.3.6 A large amount of rainfall would cause mudslides or landslides (2)  
 Mudslides/landslides destroy farmlands (2)  
 Mudslides/landslides destroy settlements (2)  
 Rock falls will result in a loss of life and damage to property (2)  
 Will result in bridges being washed away and reducing accessibility (2)  
 The regions inability to communicate will reduce the accessibility of services (2)  
 Roads that are washed away will leave communities inaccessible to emergency services (2)  
 Interruption of electricity supply (2)  
 Flooding of mountain streams will increase surface run-off and destroy valuable crops and increased stock losses (2)  
 Heavy rainfall will damage homes and leave people homeless (2)  
 Greater dependence on government services e.g. social/health (2)  
 Soil erosion/washed away fertile soil reduces the level of food security in the region (2)  
 Soil erosion silts up dams (2)  
 Disruption of vegetation/ecosystems/loss of biodiversity (2)  
 Holiday resorts are destroyed (2)  
 Reduce the amount of tourism in the area (2)  
**[May include positive impacts]**  
 Major source of water for rivers/dams (2)  
 Provides water for irrigation/livestock/domestic/industrial use (2)  
 Renewal/upgrading of destroyed infrastructure (2)  
 Flushes out pollution/improves the water quality (2)  
 [ANY TWO] (2 x 2) (4)
- 2.4 2.4.1 A (1) (1 x 1) (1)
- 2.4.2 Rising warm air (convection currents) has a greater vertical dimension in A (2)  
 No evidence of subsiding air (2)  
 Inversion layer not visible in A (2)  
 Cold air is high above city (2)  
 A low lying inversion layer is evident at B (2)  
 Warm air is blocked from rising at B (2)  
 [ANY ONE] (1 x 2) (2)

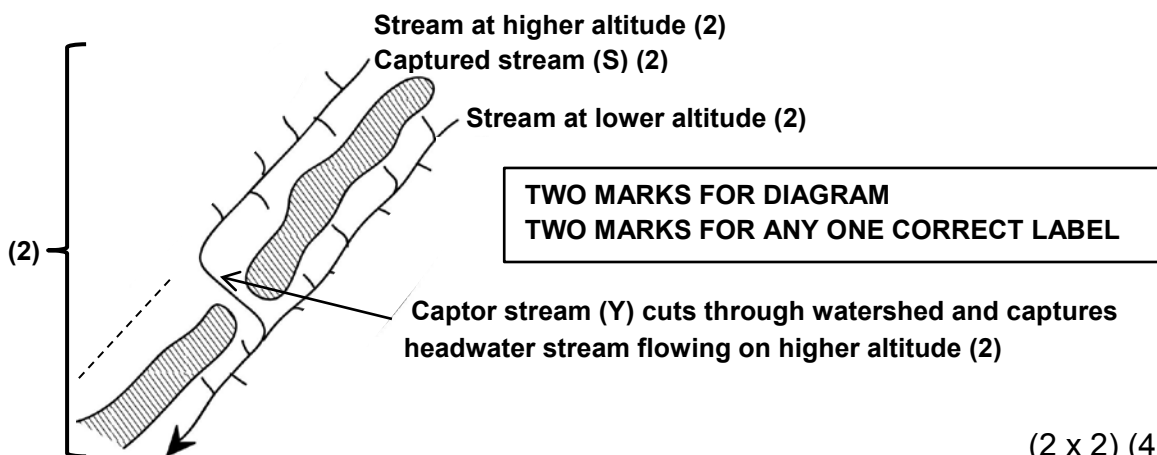


- 2.4.3 Higher concentration of pollution trapped close to the earth's surface (2)  
 Pollution trapped close to the ground mixes with fog/ground based cloud (2)  
 (1 x 2) (2)
- 2.4.4 Convection/rising air disperses pollution to upper levels of the atmosphere (2)  
 No inversion layer close to surface to trap pollution (2)  
 [ANY ONE] (1 x 2) (2)
- 2.4.5 **SUSTAINABLE SOLUTIONS TO LIMIT SMOG FORMATION IN CITY**  
 Roof top gardens/green lungs (2)  
 More natural environments e.g. green belts within the city limits (2)  
 Taller chimneys to release pollution higher in the atmosphere (2)  
 Regulate industrial activity at night to reduce the concentration of emissions within the CBD (2)  
 Bylaws/restrictions to carbon emissions by various pollution producing industries in the city (2)  
 Penalties/Fines for exceeding smog restrictions by industries located closer to the city (2)  
 More decentralised industrial growth points away from the CBD (2)  
 Filters on chimneys to reduce toxicity of emissions (2)  
 Use of green/clean source of energy (2)  
 Car-pooling/lift clubs (2)  
 Filters/catalytic converters on motor vehicle exhaust pipes (2)  
 Hybrid/solar powered/electric/battery-operated vehicles (2)  
 Improved public transport/dedicated bus lanes will result in less private vehicles within the limits of the CBD (2)  
 Park-and-ride facilities (2)  
 Promote use of bicycles in city centre (2)  
 Pedestrianise the city centre (2)  
 Increased public awareness/education (2)  
 [ANY FOUR] (4 x 2) (8)
- 2.5 2.5.1 When you have a younger river flowing on an older landscape that has been exposed through erosion of the surface layer (1)  
 A stream pattern that does not match the underlying rock structure (1)  
 A stream that imposes itself on a new rock structure after erosion of the top layer (1)  
 [CONCEPT]  
 [ANY ONE] (1 x 1) (1)
- 2.5.2 Stream now cuts through hard exposed ridges (2) (1 x 2) (2)

2.5.3



OR



(2 x 2) (4)

2.5.4 **CHANGES IN THE CAPTURED STREAM DOWNSTREAM OF THE ELBOW OF CAPTURE**

- Decreased channel flow in river as its headwaters are captured (2)
  - Decreased velocity as wetted perimeter increases (2)
  - Loss in volume/velocity decreases the energy of the river/less energetic (2)
  - Loss in volume/velocity decreases its erosive ability (2)
  - River unable to carry its load/deposition increases (2)
  - River deposits its load on the river bed (2)
  - Small stream within a larger valley/misfit stream/narrower stream (2)
  - Less water, therefore stream discharge decreases (2)
  - River could dry up (2)
  - As headwaters are lost, the drainage basin decreases (2)
  - River has less water for plants/fish (2)
  - Reduced biodiversity/destruction of river ecosystem (2)
  - River has less water for people that depend on the river for survival (2)
- [ANY FOUR] (4 x 2) (8)

- 2.6 2.6.1 Rejuvenated rivers are 're-energised' (1)  
 Display aspects of both vertical and horizontal erosion (1)  
 Rivers that actively erode downward again (1)  
 The carrying capacity of the river increases (1)  
 [ANY ONE] (1 x 1) (1)

- 2.6.2 Terraced slopes/river terraces (1)  
 New flood plain (1)  
 Valley within a valley (1)  
 Incised/entrenched meander (1)  
 [ANY TWO] (2 x 1) (2)

- 2.6.3 River capture increases the water volume (2)  
Fast flowing tributary which joins the main river (2)  
Sustained/prolonged increase in rainfall within a catchment area (2)  
Climate change that results in an increased rainfall (2)  
Tectonic shifts in the landscape (uplift) changes the base level of the river (2)  
Drop in sea-level changes the base level of the river (2)  
Sudden change in gradient (2)  
Clearing of vegetation increase run-off (2)  
[ANY TWO] (2 x 2) (4)
- 2.6.4 Incised meanders/entrenched meanders (2) (1 x 2) (2)
- 2.6.5 Construction of bridges will be more expensive and need to cover the width of the valley (2)  
Steep slopes will make it difficult to build roads/railway lines (2)  
It will be difficult to provide services (power/water) (2)  
More time consuming to develop infrastructure (2)  
Difficult to use heavy machinery in the construction of infrastructure (2)  
[ANY ONE] (1 x 2) (2)
- 2.6.6 Meanders may undercut the terrace causing it to collapse/slope instability (2)  
Terraces too high lying to access water to the farmed areas (2)  
Steep terrace slopes limits access to terraces (2)  
Narrow terraces limit cultivation (2)  
No more flooding to deposit fertile silt (2)  
At risk to mudslides/mudflows (2)  
[ANY TWO] (2 x 2) (4)
- [75]**

**SECTION B: RURAL AND URBAN SETTLEMENTS AND SOUTH AFRICAN ECONOMIC GEOGRAPHY**

**QUESTION 3**

- 3.1 3.1.1 B (1)
- 3.1.2 A (1)
- 3.1.3 A (1)
- 3.1.4 B (1)
- 3.1.5 A (1)
- 3.1.6 A (1)
- 3.1.7 B (1) (7 x 1) (7)
- 3.2 3.2.1 South Western Cape (1)
- 3.2.2 Coastal location/bordered by the ocean (sea)/have bays (1)
- 3.2.3 Durban-Pinetown/EThekweni Industrial Region (1)
- 3.2.4 Sugar cane (1)
- 3.2.5 A/South Western Cape (1)
- 3.2.6 B/Durban-Pinetown (1)
- 3.2.7 A/South Western Cape (1)
- 3.2.8 B/Durban-Pinetown/EThekweni (1) (8 x 1) (8)
- 3.3 3.3.1 The urban land set aside for a specific function/purpose (1)  
[CONCEPT] (1 x 1) (1)
- 3.3.2 Central Business District (CBD) (1) (1 x 1) (1)
- 3.3.3 All main roads lead to the CBD/converge in the CBD (2)  
Centrally located (2)  
[ANY ONE] (1 x 2) (2)

- 3.3.4 Increase in traffic congestion (2)  
Results in overcrowding (2)  
Increased air pollution levels (2)  
High noise pollution levels (2)  
More littering (2)  
Urban heat island effect intensifies (2)  
Higher probability of accidents (2)  
Increase in crime (2)  
Lack of parking facilities (2)  
Shortage of space (2)  
High land values (2)  
High rental cost of office space (2)  
More roads create more artificial surfaces which increases run-off (2)  
Urban blight of the city because of higher usage of the city (2)  
Destruction of the natural environment/ecosystems/habitats (2)  
[ANY TWO] (2 x 2) (4)

3.3.5 **HOW DO GREENBELTS REDUCE THE ENVIRONMENTAL PROBLEMS CAUSED BY ACCESSIBILITY?**

**Refer to environmental factors only**

- Controls greenhouse gases (2)  
Reduces the effect of urban heat islands/lowers temperatures (2)  
Cleans the air/purifies by absorbing carbon dioxide/reduces air pollution (2)  
Carbon sink by releasing oxygen (2)  
Reduces run-off (2)  
Absorbs/reduces city noises and traffic sounds/buffers noise/filters noise (2)  
Creates a habitat for other living organisms (2)  
Creates a pleasing natural environment for recreational purposes (2)  
Improves the aesthetics of the urban environment (2)  
Greater biodiversity (2)  
[ANY FOUR] (4 x 2) (8)

- 3.4 3.4.1 When some buildings in the city becomes run-down/dilapidated and are not fixed/maintained (1)  
[CONCEPT] (1 x 1) (1)
- 3.4.2 Landlords do not maintain buildings (1)  
Overcrowding of properties (1)  
Future zone of expansion of CBD (1)  
Intention to change original function of building (1)  
Illegal occupation of buildings (1)  
Sub-letting (1)  
Poor service delivery (1)  
[ANY ONE] (1 x 1) (1)

- 3.4.3 Deadline to move was extended (2)  
Nowhere to go/no alternative accommodation (2)  
Do not want to move elsewhere (2)  
Sentimental value attached to house/community/familiar with the community (2)  
  
Cannot afford to move elsewhere/no money to relocate (2)  
They don't want to be moved far from the city/place of work (2)  
[ANY ONE] (1 x 2) (2)
- 3.4.4 Residents are forced to move out of the buildings that will be renewed (2)  
Residents are forced to settle in new communities that they are not familiar with (2)  
Residents level of access to amenities in the CBD will be reduced (2)  
Residents will incur increased costs due to the movement (2)  
They will be settled far distances out of the city (2)  
Disruption of social networks/linkages/heritage/sentimental buildings (2)  
Lack of consultation/excluded from decisions to effect urban renewal (2)  
[ANY ONE] (1 x 2) (2)
- 3.4.5 Buildings in the transition zone are dilapidated (2)  
Creates health and safety hazard (2)  
Urban decay is highest in the transition zone (2)  
To prevent urban decline that can spill over to the CBD (2)  
To prevent vandalism/graffiti (2)  
Residential buildings e.g. flats in the transition zone are mostly occupied illegally (2)  
To prevent the influx of vagrants (2)  
Most landlords do not maintain the buildings that they own in the transition zone (2)  
To upgrade buildings/making buildings more aesthetically pleasing/improve the prestige of the city (2)  
Many social ills (crime/prostitution/drug abuse/domestic violence) (2)  
High land value but low building value (2)  
To increase the property value (2)  
To prevent loss of money for the city (2)  
To attract more investors into the area (2)  
To attract more tourists (2)  
Facadism (preservation of the building frontage) (2)  
Preserve the building heritage (2)  
[ANY TWO] (2 x 2) (4)

- 3.4.6 Only people with a higher income can afford to stay here (2)  
 Excludes lower income earners (who don't have affordability) (2)  
 Area will now have a higher status/prestige (2)  
 Value of property increases (2)  
 More costly to buy/rent (2)  
 Upkeep of property will increase (2)  
 Continuous gentrification will take place (2)  
 Higher levels of security and safety (increases the rentals which only higher income earners can afford) (2)  
 [ANY TWO] (2 x 2) (4)
- 3.5 3.5.1 Coega (1)  
 East London/ELIDZ (1)  
 Richards Bay/RBIDZ (1)  
 Dube Trade Port (DTP) (1)  
 Saldanha Bay (1)  
 [ANY ONE] (1 x 1) (1)
- 3.5.2 To attract foreign investments and increase exports (1) (1 x 1) (1)
- 3.5.3 Provide attractive service rebates/government incentives (water/electricity/transport) (2)  
 Tax rebates/concessions (2)  
 Provide well-developed infrastructure (2)  
 Cheaper and open land (2)  
 Access to labour supply (2)  
 Access to harbours and transport links for export (2)  
 It is closer to export markets (2)  
 Duty free benefits on importing raw materials (2)  
 Attracts potential investors (2)  
 [ANY TWO] (2 x 2) (4)
- 3.5.4 Relieves pressure on infrastructure (2)  
 Less pollution (2)  
 Less pressure on services/prevents over-utilising of resources (water and electricity) (2)  
 Less traffic congestion (2)  
 Reduces rural-urban migration (2)  
 Reduces overcrowding (2)  
 [ANY TWO] (2 x 2) (4)

- 3.5.5 Providing job opportunities (2)  
 Up-skilling people (2)  
 Lowering of crime rates (2)  
 Poverty alleviation/better standard of living (2)  
 Improved infrastructure (2)  
 Improved service delivery (2)  
 Better housing (2)  
 Contributes to the local economy (2)  
 Industrialists are involved in social responsibility initiatives (2)  
 The multiplier effect/development of associated or linked industries (2)  
 [ANY TWO] (2 x 2) (4)
- 3.6 3.6.1 Increased (1) (1 x 1) (1)
- 3.6.2 Decrease in rank/Dropped seven places (1) (1 x 1) (1)
- 3.6.3 When all the people have access to nutritious (healthy) food (2) (1 x 2) (2)
- 3.6.4 Food security enables growth and health in South Africa's population (2)  
 Enables South Africa to improve nutrition of its workforce (2)  
 Ensures that all sectors of the population are fed constantly/no food shortage (2)  
 Ensures higher productivity levels of inhabitants (2)  
 To prevent hunger and famine (2)  
 To prevent malnutrition/stunted growth/diseases (2)  
 A healthy population reduces the burden on the government/less expenditure on healthcare (2)  
 Increases life expectancy and labour force (2)  
 Reduces need to import food at high cost (2)  
 Lower food prices (2)  
 Outflow of capital from the country is reduced (2)  
 To prevent social uprisings (2)  
 [ANY TWO] (2 x 2) (4)



3.6.5 **REASONS FOR LOW FOOD SECURITY INDEX IN SOUTH AFRICA**

**Natural**

Drought conditions/natural disasters increased resulting in a drop in production levels reducing the amount of food available (2)

Climate change has resulted in variable rainfall over most cultivation regions which has dramatically reduced production levels (2)

Pests and diseases decrease crops (2)

Soil erosion resulting in thin and poor soils/large areas have infertile soils (2)

**Social/Services**

Electricity supply is compromised and increased costs affects food production and food storage (2)

Lack of access to water supplies for irrigation (2)

Increased health risks/reduced life expectancy (HIV/AIDS) decreases the ability to produce food (2)

Poor transport facilities in rural areas make food less accessible (2)

Poor use of technology or research/poor farming methods/lack of skills (2)

Uncertainty because of land reform/failed land reform programmes result in land not being cultivated (2)

Population demand for food is greater than food supply (2)

Increase in farm murders drive farmers of their land (2)

**Economical**

Economic decline and foreign ratings creates an increasing inflation rate which increase the cost of food (2)

Increased rural-urban migration reduces food production (2)

High cost of food (2)

Lack of employment/poverty to buy expensive food (2)

Fluctuating food prices (2)

High production costs e.g. purchasing fertilisers (2)

Subsistence farming has a low productivity (2)

Lack of access to loans/lack of capital to invest in farming activities (2)

Not enough commercial farmers (2)

Farmers produce for the export market and not for the local market (trade policies) (2)

Misappropriation of funds for the development of farmers (2)

Processed food (e.g. tinning of food) is expensive (2)

[ANY FOUR]

(4 x 2) (8)

[75]

**QUESTION 4**

- 4.1 4.1.1 B (1)
- 4.1.2 B (1)
- 4.1.3 B (1)
- 4.1.4 A (1)
- 4.1.5 A (1)
- 4.1.6 B (1)
- 4.1.7 A (1)
- 4.1.8 A (1) (8 x 1) (8)
- 4.2 4.2.1 C/Large-scale (1)
- 4.2.2 E/Intensive farming (1)
- 4.2.3 A/Urban agriculture (1)
- 4.2.4 B/Labour intensive (1)
- 4.2.5 F/Export market (1)
- 4.2.6 G/Home market (1)
- 4.2.7 D/Monoculture (1) (7 x 1) (7)
- 4.3 4.3.1 Market area from where an urban settlement/business draws customers (1)  
[CONCEPT] (1 x 1) (1)
- 4.3.2 City larger/bigger/wider than the town (1)  
OR  
Town smaller/narrower than the city (1) (1 x 1) (1)
- 4.3.3 The order of the goods sold in a particular service area/order of services  
provided/degree of specialisation of services/goods (1)  
Number of functions/goods that are offered (1)  
Type of functions offered/goods sold (1)  
Variety of goods/services offered (1)  
Price of goods/services (1)  
[ANY ONE] (1 x 1) (1)

- 4.3.4 Zone of competition/where people can choose which place to shop at (2)  
Personal choice/convenience of where to go (2)  
Travel to place which offers better services (2)  
If there is little impact on travelling time and cost for the product they want to purchase (2)  
Going to either town or city for another purpose and shopping while there (2)  
En-route to place of work/residence (2)  
Offering of cheaper goods/services (2)  
Variety of goods offered (2)  
For high order/speciality goods/services customers can choose to go to the city (2)  
For low order/daily goods/services customers will most likely go to the town (2)  
[ANY TWO] (2 x 2) (4)
- 4.3.5 Distance travelled (range) will depend on the order of the goods/service (2)  
High order goods/services/consumer goods have a greater range and draw customers from farther away (2)  
Low order goods/services/basic commodities/convenience goods have a shorter range therefore people not prepared to travel very far (2)  
Cost of goods/services – the cheaper, the shorter the distance/the more expensive, the farther the distance (2)  
[ANY TWO] (2 x 2) (4)
- 4.3.6 People not prepared to travel long distances to obtain lower order goods/services/convenience goods/functions (2)  
More low order centres will exist to provide for the daily needs of people/goods/functions that are frequently needed (2)  
Increased costs to obtain low order goods/services/functions if you have to travel to high order centres for daily needs (2)  
Low order centres serve a small area (2)  
High order goods and services are not required daily/less frequently (2)  
Fewer outlets provide high order goods/services/functions/not regular use of services (2)  
People are prepared to travel long distances to obtain high order goods/services/functions therefore fewer high order centres needed (2)  
High order centres serve a large area (2)  
Economic progression - as economic development takes place, some smaller centres will grow into larger centres (as number of goods/services/functions increases, that town will grow) (2)  
[ANY TWO] (2 x 2) (4)
- 4.4 4.4.1 Drought/farm dried up/lack of rainfall (1)  
Loss of property/unemployment (1)  
Poor standards of living in the rural area (1)  
[ANY ONE] (1 x 1) (1)
- 4.4.2 Higher standard of living (1) (1 x 1) (1)

- 4.4.3 Not all people have a higher standard of living evident in strip 4 (1)  
 Some people live in shacks/informal settlements (1)  
 Some poor living conditions (1)  
 High rate of unemployment (1)  
 [ANY ONE] (1 x 1) (1)
- 4.4.4 Employment/job opportunities (2)  
 Basic services (2)  
 Education/medical services (2)  
 Formal housing (2)  
 Cultural/recreational/entertainment/'bright lights' (2)  
 [ANY TWO] (2 x 2) (4)
- 4.4.5 **MAKING PROVISION FOR AN INFLUX OF RURAL MIGRANTS**  
 New low cost housing projects/to prevent housing shortages/curb the development of informal settlements (2)  
 Formalising the current informal settlements (2)  
 Improved infrastructure (2)  
 Improved basic services (2)  
 Money to install solar geysers (2)  
 Money to install water storage systems/JoJo Tanks (2)  
 Improved public transport (2)  
 Improved sanitation (2)  
 Access to education (2)  
 Regular waste removal (2)  
 Preventing spreading of diseases due to unhygienic living conditions (2)  
 Access to clinics (2)  
 Improved drainage systems (2)  
 Reskilling programs (2)  
 Improved crime prevention and policing (2)  
 Accessible social services (2)  
 Must create employment opportunities (2)  
 To maintain existing services (2)  
 To prevent poor service delivery protests (2)  
 Providing a better quality of life for inhabitants (2)  
 [ANY FOUR] (4 x 2) (8)
- 4.5 4.5.1 KwaZulu-Natal (1) (1 x 1) (1)
- 4.5.2 'The Dube Trade Port is set to be a major logistics platform for Southern Africa, as the Port of Durban provides connectivity to 53 international destinations and access to local distribution networks' (1)  
**OR**  
 Connectivity/accessibility to rest of the world/global trade connections/  
 promoting exports (1) (1 x 1) (1)

- 4.5.3 Sugar (1)  
 Products related to sugar e.g. sweets/biscuits/chocolates (1)  
 Aluminium products (1)  
 Motor vehicles (1)  
 Oil (1)  
 Chemicals/paint (1)  
 Textiles (1)  
 Footwear (1)  
 Paper products (1)  
 Soap (1)  
 Ship building (1)  
 Rubber (1)  
 [ANY TWO] (2 x 1) (2)
- 4.5.4 Wide range of raw materials available (2)  
 Suitable climate to produce wide range of agricultural products (2)  
 Large skilled and unskilled labour force (2)  
 Large local market (2)  
 Access to other major industrial regions (2)  
 Well-developed infrastructure (2)  
 Availability of energy resources (electricity) (2)  
 Availability/reliability of water resources (2)  
 Flat land on the coastal plain (2)  
 Development of an international airport (2)  
 [ANY TWO] (2 x 2) (4)
- 4.5.5 **AGRICULTURE ZONE**  
 Supports agricultural production and increased yields (2)  
 Increases the raw materials used in industries (2)  
 Greater output from industries for local and international trade (2)  
 Supports further industrial growth/development of linked industries (2)
- CARGO TERMINAL**  
 Makes handling of high volumes easier (2)  
 Profits boosted due to better handling of cargo/less time wasted (2)  
 Importing of more raw materials to be used in industries (2)  
 More finished goods can be exported (2)  
 Supports further industrial growth/development of ancillary (support) industries (2)  
 Trade links can be expanded (2)  
 Attracts foreign investments (2)  
 [ANY FOUR. MUST REFER TO BOTH] (4 x 2) (8)
- 4.6 4.6.1 Concerned with the provision of services (1)  
 [CONCEPT] (1 x 1) (1)
- 4.6.2 Finance, real estate and business service activities (1)  
 (ACCEPT Construction) (1)  
 [ANY ONE] (1 x 1) (1)

4.6.3 **FINANCE, REAL ESTATE AND BUSINESS ACTIVITIES**

- Gauteng is the economic hub of South Africa (2)
- There are many Head Offices and businesses (2)
- Concentration of these economic activities (2)
- Office and business space readily available (2)
- The Johannesburg Security/Stock Exchange (JSE) located here (2)

**OR**

**CONSTRUCTION**

- Gauteng experiences rapid growth in economic development (2)
- Industrial growth requires more factories (2)
- Influx of businesses requires office space (2)
- Influx of people requires housing (2)
- Constant upgrading of older buildings/urban renewal projects (2)
- Constant upgrading of infrastructure/well-developed infrastructure promotes construction industry (2)
- [ANY ONE, DEPENDING ON ANSWER TO QUESTION 4.6.2] (1 x 2) (2)

4.6.4 It contributes a large percentage/more than 30% (2) (1 x 2) (2)

4.6.5 More profits are generated from the tertiary sector/tertiary products have a higher value (2)  
 Exporting primary products has a low profit margin/primary products has less value (2)  
 Tertiary sector is more indicative of the skill levels of the labour force (2)  
 Tertiary sector generates a more steady income as compared to the primary sector (2)  
 Tertiary activities less at risk to natural disasters (2)  
 Climatic changes put farming products at risk (2)  
 Higher salaries are earned which strengthens buying power (2)  
 Tertiary activities has a greater potential to attract foreign investments (2)  
 To protect raw materials from being depleted/destroyed (2)  
 [ANY TWO] (2 x 2) (4)

4.6.6 Transport/airports increases accessibility in terms of international links/promotes international trade (2)  
 Gautrain provides alternative means of accessibility (2)  
 Good transport networks connect Gauteng with rest of SA/promotes domestic trade (2)  
 Allows for the easy transportation of goods (2)  
 Transport networks attracts foreign investment/promotes further growth (2)  
 Links Gauteng to harbours and facilitates international trade (2)  
 Rapid transport services to transport people to work and back (2)  
 Promotes tourist-related industries (2)  
 Increases access to tertiary services (2)  
 Leads to growth in tertiary sector (2)  
 [ANY TWO] (2 x 2) (4)

**[75]**

**GRAND TOTAL: 225**