



NATIONAL SENIOR CERTIFICATE EXAMINATION
NOVEMBER 2019

GEOGRAPHY: PAPER I
MARKING GUIDELINES

Time: 3 hours

200 marks

These marking guidelines are prepared for use by examiners and sub-examiners, all of whom are required to attend a standardisation meeting to ensure that the guidelines are consistently interpreted and applied in the marking of candidates' scripts.

The IEB will not enter into any discussions or correspondence about any marking guidelines. It is acknowledged that there may be different views about some matters of emphasis or detail in the guidelines. It is also recognised that, without the benefit of attendance at a standardisation meeting, there may be different interpretations of the application of the marking guidelines.

QUESTION 1 INTEGRATED QUESTION: THE GEOGRAPHY OF SOUTH WESTERN CAPE – GEORGE AND SURROUNDS

1.1 Subtropical anticyclones and associated weather conditions

- 1.1.1 (a) South Indian anticyclone
- (b) cold front
- (c) coastal low
- (d) berg winds

1.1.2 ANY TWO OF THE FOLLOWING ANSWERS

- approaching cold front
- cooler temperatures over the interior
- the clear conditions over the interior
- high pressure over the land / interior
- South Indian anticyclone in line with SA/moved north
- berg winds along the coast
- large difference in dew point temperature and air temperature (inland)

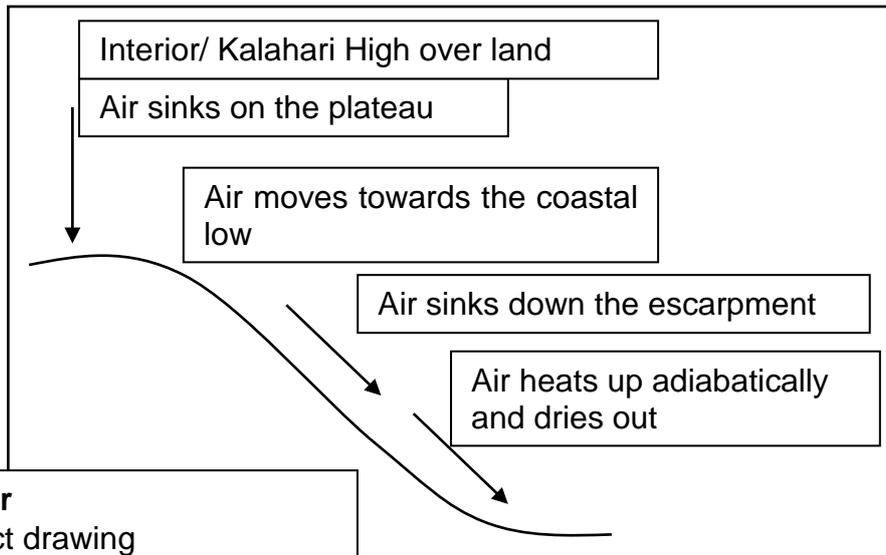
1.1.3 ANY TWO OF THE FOLLOWING ANSWERS

- wind will back / change
- wind speed will increase
- temperature will drop
- rainfall at the front
- air pressure will increase
- general concept of weather changes occurring (wind / pressure / temperature)
- humidity increases
- change in dew point temperature
- increase in cloud cover (cumulonimbus)

1.1.4

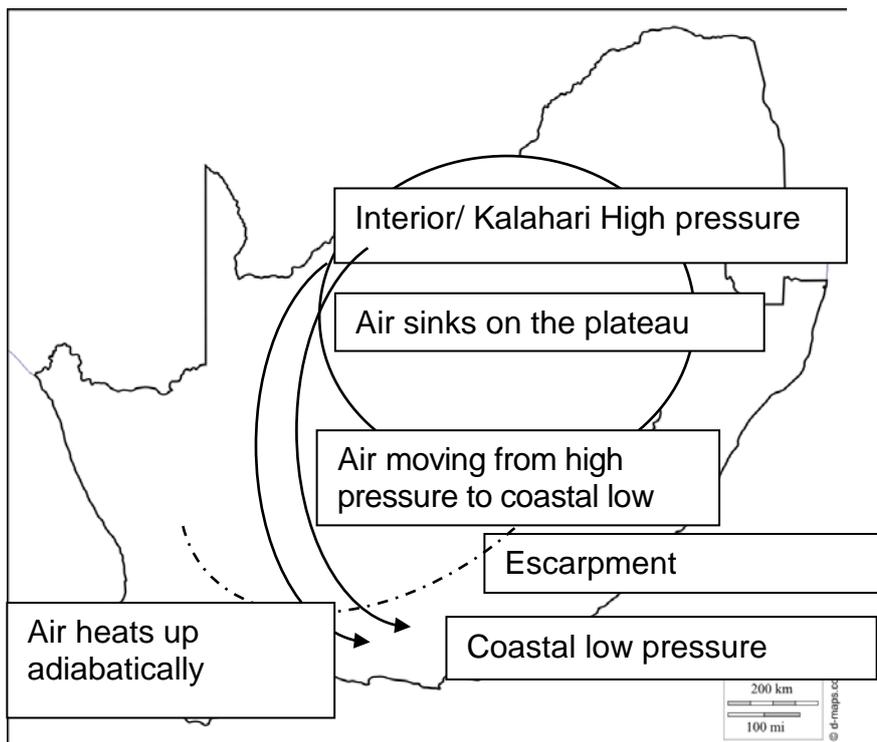
Air temperature	31 °C
Dew-point temperature	3 °C
Wind speed	20 knots (36-40 km/h)
Wind direction	north-north-westerly / NW
Atmospheric pressure	1017 – 1020 hPa

1.1.5



- Marks for**
- correct drawing
 - concept of air moving from interior to coastal low
 - air heating up as air moves down the escarpment

OR



1.2 1.2.1 1,3 °C

1.2.2 This is due to the thermal belt within the valley, which creates a temperature inversion.

Concept of air changing with altitude (referring to point E and F)

Aspect – change of temperature on slopes

1.2.3 All the cold air collects at the bottom of the valley making it very cold and any moisture collected on the ground will become frost.

1.2.4 Katabatic / mountain / downvalley wind / descending air / downslope

1.3 1.3.1 False

1.3.2 True

1.3.3 False

1.3.4 True

1.3.5 True

1.4 1.4.1 G – watershed / drainage basin boundary / drainage divide / catchment area

H – confluence

I – meander / ox-bow lake / meander loop

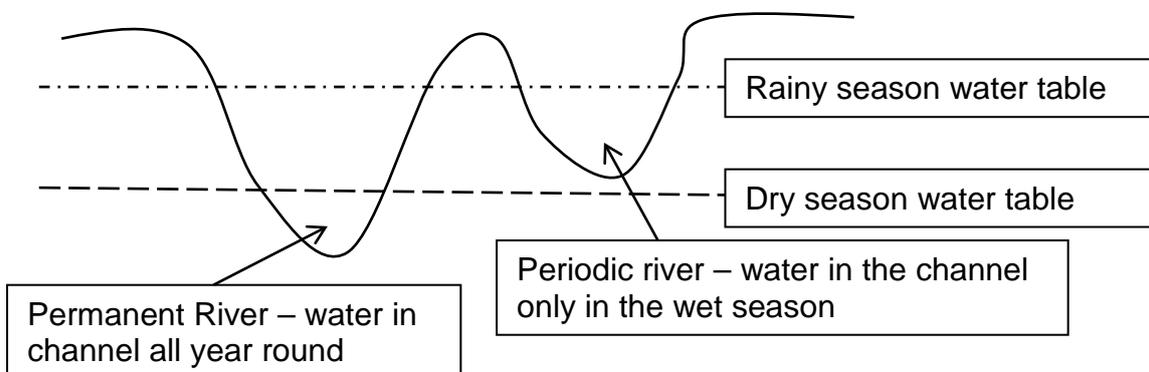
J – mouth

1.4.2 A superimposed drainage pattern forms when a stream's original rock surface was removed by erosion and the stream now flows over newly exposed rocks and structures of which it is quite independent.

Landscape is older than the river

(Candidates may draw this.)

1.4.3



1.4.4 Trellis drainage pattern: smaller tributaries feed into the river from the steep slopes on the sides of mountains such as fold mountains. These tributaries enter the main river at approximately 90-degree angles.

Alternating bands of hard and soft rock with parallel mountain ranges.

1.4.5 ANY TWO of the following answers

- soil moisture
- the gradient of the slope
- type of rainfall
- type of rock
- type of soil
- vegetation coverage
- type of vegetation
- porosity and permeability
- land use

1.4.6 ANY TWO RELEVANT POINTS

The candidate is expected to DISCUSS and should, therefore, expand on and explain each point.

- Recreation
Dams provide prime recreational facilities. Boating, skiing, camping, picnicking, and boat-launching facilities are all supported by dams.
- Flood control
In addition to helping farmers, dams help prevent the loss of life and property caused by flooding. Flood control dams impound floodwaters and then either release them under control to the river below the dam or store or divert the water for other uses. For centuries, people have built dams to help control devastating floods.
- Water storage
Dams create reservoirs that supply water for many uses, including industrial, municipal, and agricultural.
- Irrigation
Cropland is irrigated using water stored in dams. Thousands of jobs are tied to producing crops grown with irrigated water.
- Electricity generation
Hydropower is considered clean because it does not contribute to global warming, air pollution, acid rain, or ozone depletion.
- Debris control
In some instances, dams provide enhanced environmental protection, such as the retention of hazardous materials and detrimental sedimentation.

1.5 1.5.1 K – planned irregular
L – gridiron / grid / rectangular

1.5.2 The candidate is expected to DISCUSS and should, therefore, expand on and explain each point.

L – ANY ONE OF THE FOLLOWING:

- easy to navigate around
- easy to extend streets
- easy to subdivide stands and to build on
- easy to add in services

K – ANY ONE OF THE FOLLOWING:

- interesting pattern
- better traffic flow
- less traffic lights
- follows relief

1.5.3 (a) ANY TWO RELEVANT POINTS

- tall buildings
- usually gridiron street patterns
- most accessible / converging transport routes
- most businesses (commercial) are found in the CBD
- high land value
- congestion / busy / overcrowding

(b) This is due to the high price of land and the taxes that need to be paid. So to maximise, the buildings are built taller.
Concept of lack of space

1.5.4 (a) ANY TWO RELEVANT POINTS

- road network
- bus routes
- rivers and water
- built-up area /suburbs
- railways
- topography / relief
- bus stops
- transport routes

(b) ANY ONE FOR EACH

- Bus stop
 - coordinate
 - altitude
 - types of bus
 - times of buses
 - name of bus stop
 - name of road
 - how many passengers per day

- Road
 - length
 - coordinate
 - altitude
 - type of road
 - the material used to build a road
 - number of cars using the road

1.5.5 (a) ANY TWO RELEVANT POINTS

The candidate is expected to **EXPLORE** and should, therefore, expand on and explain each point.

- access to the CBD
- access to the industrial areas
- access to the highway
- shorter commutes
- cheaper for the commuter
- reduced traffic congestion
- increases mobility
- makes the roads safer
- encourages healthier habits

- (b) It is a city that was planned to segregate people of different races and there was a deliberate design to make sure they would develop separately. Could be evidence of a buffer zone.

1.6 1.6.1 Invasion and succession

1.6.2 ANY TWO RELEVANT POINTS

The candidate is expected to **COMMENT ON** and should, therefore, expand on and explain each point.

- the needs of an area change
- gentrification
- filtering
- change in traffic patterns
- introduction of a public transport system
- main roads change the needs of a land
- higher rental
- higher taxes
- densification
- urban renewal – boosts economy / reduces crime / uplifts area

1.6.3 ANY TWO RELEVANT POINTS

The candidate is expected to **DISCUSS** and should, therefore, expand on and explain each point.

- increase in property value
- decrease in property value
- could spark gentrification
- people could move in / out of the area
- more traffic on the roads
- more crime
- improve land use
- blight

- 1.7
- Discuss the importance of hops agriculture to the South African economy. NB: Examples of each of these points and the elaboration on these points makes a fair essay great.
 - new jobs
 - new farmers
 - more exports
 - new microbreweries
 - beverages and herbal medicine
 - new research facilities
 - tourism will bring in foreign exchange to an area
 - Explain how the growth of local hops production will boost linked industries.
 - this will add to beer production
 - the bottling industry will benefit
 - glass industry will benefit
 - label production
 - commercial and marketing industries
 - export and import companies
 - there will be an improvement in the trade balance
 - new business opportunities
 - new skills development centres/universities
 - fertilizer companies would benefit
 - the transport industry would benefit
 - the advertising industry
 - paper and board industries could be developed
 - barley and wheat farming would benefit
 - tea and soft drink factories
 - artificial light industries
 - irrigation companies
 - pillow-making businesses (sedative effect)
 - hops is anti-bacterial so can be used to make herbal medication (this could include medication for sleeplessness)

- Analyse some of the challenges faced by hops farmers and beer-brewing companies.
 - Hops
 - not ideal climate for hops farming
 - climate change
 - drought and variable rainfall
 - land claims
 - costly to set up and costly training of workers
 - limited suitable land
 - labour unrest
 - costly transport through the mountains (since hops is mainly cultivated in George)
 - farm attacks in South Africa are on the increase
 - skimming of hops and theft could be a problem
 - artificial light is very expensive
 - suitable storage facilities are needed
 - pests and disease could impact yields
 - Brewing
 - high taxes
 - sin taxes
 - lack of skills
 - lack of government support
 - SA is a water-scarce country as it is and a large amount of water is required for the brewing process
 - water restrictions in South Africa will increase the costs of production
 - load shedding could lead to large amounts of beer having to be discarded
 - because South Africa has very few suitable areas in which to grow hops, there may be a large need to import hops. This leads to high import costs for breweries
 - hops has a short self-life
 - **small** businesses/micro-breweries will be impacted upon because of the difficulty of competing in this industry (because of the challenges)
- Discuss the importance of the brewing industry to the South African economy.
 - create new jobs
 - create new opportunities for linked industries
 - create new centres of development
 - development of SDIs or IDZs
 - foreign income
 - better trade balance (exporting more)
 - development or bettering of ports at which exports occur (e.g. PE for the export of hops)

CRITERIA	MARKS
<p><i>Writing skills</i></p> <ul style="list-style-type: none"> • Take into consideration structure and presentation. • Use of brief introduction and conclusion. • Logical discussion and use of subheadings. 	5
<p><i>Content knowledge</i></p> <ul style="list-style-type: none"> • Correct use of geographical terminology and concepts. • Adherence to topic and subheadings. 	14
<p><i>Supporting evidence – analysis and understanding</i></p> <ul style="list-style-type: none"> • The ability to analyse and evaluate the topic is assessed in this category. • Reference made to case study material/ fact file/ source material provided. • If appropriate, reference must be made to familiar/ local or other examples. 	5

- Please DO NOT tick when marking an essay – this confuses the checkers.
- Rather, *underline valid and appropriate points and use the code system below.*

<p>GEOGRAPHY ESSAY CODES</p> <p>E – Excellent G – Good V – Vague R – Repetition I – Irrelevant F – Fair</p>	<p>CONTENT:</p> <p>_____ Underline relevant points if correct</p> <p> Circle incorrect points</p> <p>EVIDENCE:</p> <p>() Bracket evidence</p>
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Criteria	(Level 3) Excellent – Good	(Level 2) Satisfactory	(Level 1) Poor
<p><i>Writing skills</i></p> <ul style="list-style-type: none"> • Taking into consideration structure and presentation. • Use of brief introduction and conclusion. • Logical discussion and use of subheadings. <p>[5 marks allocated to this component]</p>	<p>Suitable introduction and conclusion. Sophisticated, coherent and structured writing. Subheadings and paragraphs have been effectively used. The report is concise, well-structured and succinct.</p> <p>(4–5 marks)</p>	<p>Introduction and conclusion present, although not ideal. Attempts to adhere to subheadings and use of paragraphs. Report deviates from the point in places and lacks brevity.</p> <p>(3 marks)</p>	<p>Writing is weak and almost unintelligible. No introduction or conclusion provided. No use/adherence to subheadings. Long sentences, poor grammar and ineffective use of paragraphs. The report is repetitive. Bullet points may have been used. 1 = must be awarded for any form of written attempt/effort.</p> <p>(0–2 marks)</p>
<p><i>Content knowledge</i></p> <ul style="list-style-type: none"> • Correct use of geographical terminology and concepts. • Adherence to topic and subheadings. <p>[14 marks be allocated here]</p>	<p>Relevant content and detailed discussion of the topic. Good usage of geographical terminology and concepts. An appropriate number of facts presented/ subheading. Min of 2 points for every sub-heading will earn candidate 10 marks. Extension work will provide a further 4 marks.</p> <p>(10–14 marks)</p>	<p>Some relevant content. An overview/ general discussion of key issues. Basic usage of geographical concepts and terminology. (50–60% of required facts presented/ subheading). 1 point/sub-heading, or 2 points provided and only 2 paragraphs.</p> <p>(6–9 marks)</p>	<p>Digression from the topic. Weak grasp of concepts and terminology. Superficial/poor discussion. Almost no relevant facts/subheading.</p> <p>(0–5 marks)</p>
<p><i>Supporting evidence – analysis and understanding</i></p> <ul style="list-style-type: none"> • The ability to analyse and evaluate the topic is assessed in this category. • Reference made to case study material/ fact file/source material provided. • If appropriate, reference must be made to familiar/local or other examples. <p>[5 marks allocated to this component]</p>	<p>The candidate is able to argue and evaluate appropriately. There is strong evidence of accurate application of understanding and evidence provided. The report demonstrates the understanding and integration of relevant case study/fact file/ source material into the context of the report. Looking for evidence of unpacking content and high-order integration.</p> <p>(4–5 marks)</p>	<p>Superficial links made to case study/ fact file/source material. Although reference to supporting examples has been made, it is not clear that the candidate has a good understanding of the example/case study material. Supporting evidence does not always relate appropriately to the subheading or context of the discussion. Discussion lacks depth.</p> <p>(3 marks)</p>	<p>Limited to no reference made to case study/ fact file/source material. Examples not provided. Has little to no geographical meaning. Little analysis or understanding. Demonstrates minimal understanding of the topic.</p> <p>(0–2 marks)</p>

QUESTION 2 CLIMATE, WEATHER AND GEOMORPHOLOGY

2.1 2.1.1 C

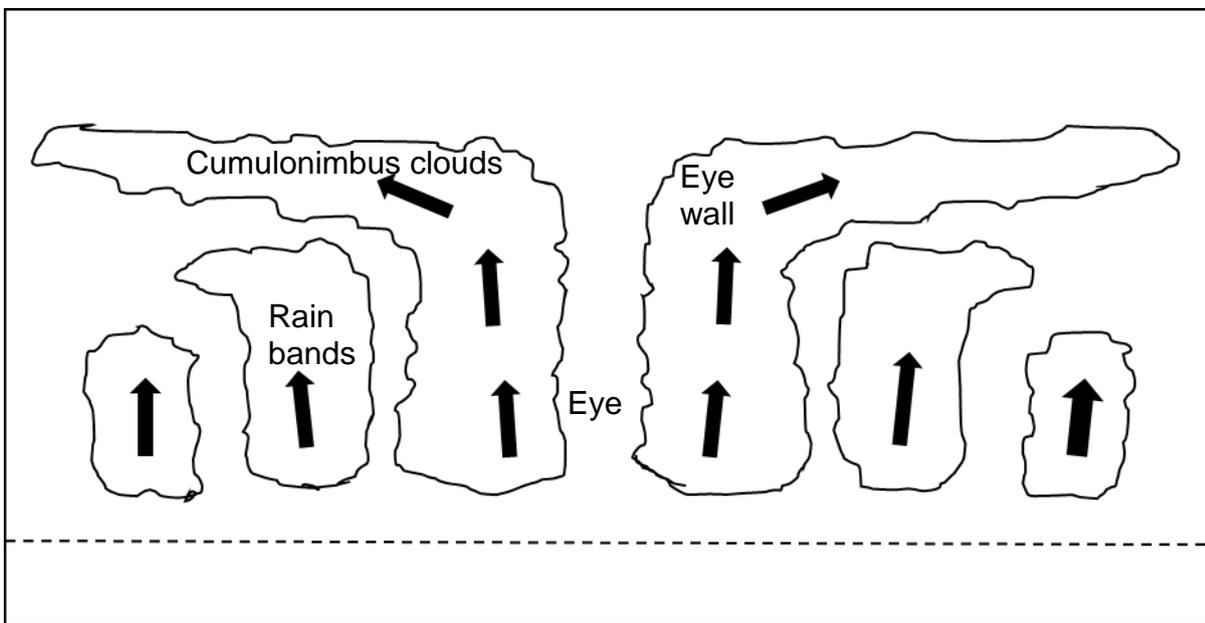
2.1.2 F

2.1.3 E

2.1.4 B

2.1.5 A

2.2 2.2.1 (a)



- 2 marks for the basic drawing (airflow and clouds on either side of eye)
- If plan view drawn, then 0 for diagram
- 2 marks for 4 labels (½ mark each)

(b) Any answer between east and north-east.
Accept TOWARDS the W and SW

2.2.2 (a) ANY ONE RELEVANT ANSWER

- eye
- eyewall
- heavy rain
- strong winds
- intense LP (Below 1000 hPa)
- vortex
- the system has been named

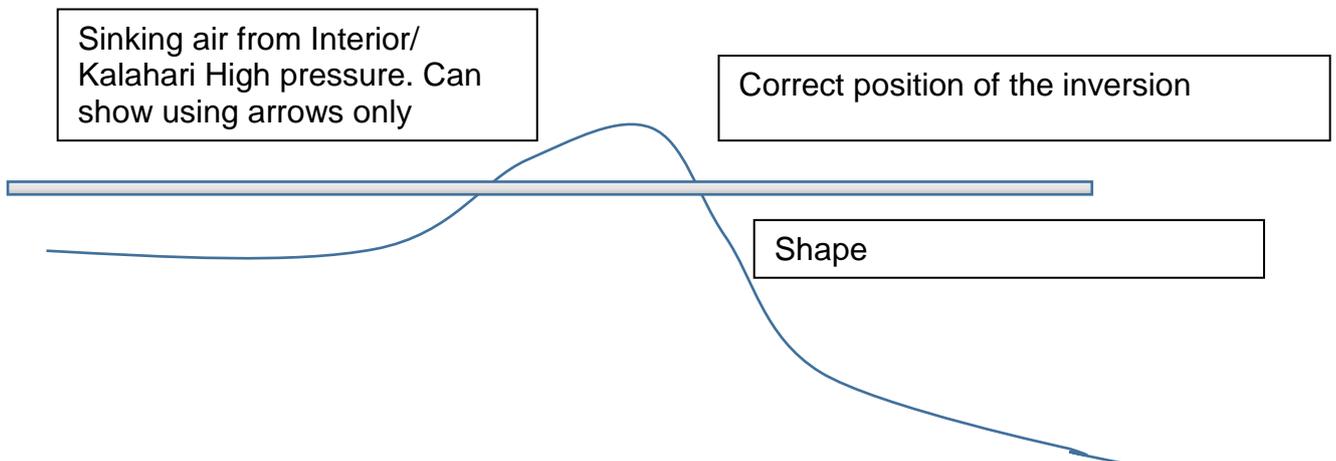
- (b)
 - Tropical cyclone needs to be over warm water to feed the system.
 - there is also no friction over the ocean (only 1 mark)
 - latent heat/energy
 - high levels of evaporation
 - high humidity
 - instability

- (c) The candidate gets rewarded for correctly **naming** two hazards and correctly **describing** how these two hazards caused the damage. MUST link to buildings
 - Strong wind
 - winds of over 150 km/h will take roofs off and make debris fly everywhere
 - Heavy rain
 - this will cause flooding and the rivers will break their banks
 - Storm surge
 - strong waves caused by the storm coming off the ocean will cause damage to roads and beachfront properties

2.3 2.3.1 When temperature increases with altitude.

2.3.2 Kalahari or Interior High Pressure or Continental HP (NOT KHP)

2.3.3



2.3.4 The candidate is expected to **EXPLAIN** and should, therefore, expand on and explain each point.

- During winter the land is cool so the inversion layer is close to the ground and below the escarpment.

OR

- During summer the inversion layer is pushed higher due to the land being warm.

2.4 2.4.1 abrasion

2.4.2 bankfull

2.4.3 interfluve

2.4.4 knickpoint

2.4.5 sinuosity

2.5 2.5.1 Terracing/ valley in a valley / new flood plain / stepped

2.5.2 The candidate is expected to DISCUSS and should, therefore, expand on and explain each point.

Velocity:

- The higher the velocity the greater the size of particles moved
- As the river flows faster, it is capable of carrying more and larger sediment.

Particle size:

- Small particles deposited last
- Smaller particles are easier for the river to carry.
- The larger loads will deposit first

Deposition at Q

- Due to friction, water slows on the inner bank and therefore deposition

2.6 2.6.1 ANY TWO RELEVANT ANSWERS

- destroy homes
- wash away possessions
- loss of life
- spread of pollution and debris
- people having to relocate
- damage to vegetation
- spread of disease
- riverbanks washed away
- mudslides

2.6.2 ANY TWO RELEVANT ANSWERS

- build dams
- weirs
- wetlands management
- flood-line management
- unblocking drains
- canalise the river
- redirect the river
- plant vegetation

2.6.3 The candidate could say flooding can be accurately predicted or flooding cannot be accurately predicted. The candidate is expected to SUGGEST and should, therefore, expand on and explain each point.

<i>Can be accurately predicted</i>	<i>Cannot be accurately predicted</i>
<i>Recording rainfall</i>	<i>Cannot predict where the water will go</i>
<i>Historical highs</i>	
<i>Use of storm hydrographs</i>	

2.64 The candidate is expected to EXPLAIN and should, therefore, expand on and explain each point. 2 marks for each point / idea:

- Community projects
 - river clean-ups / education of the community / using NGOs

- Remote sensing
 - monitoring the river levels from afar, such as satellite webcams or drones

- GIS mapping (Focus is on application of concept. Not terminology)
 - Buffer
 - flood-prone areas
 - mapping of variable areas
 - data layering
 - monitor change

QUESTION 3 RURAL AND URBAN SETTLEMENT AND ECONOMIC GEOGRAPHY OF SOUTH AFRICA

- 3.1 3.1.1 C dry-point site
- 3.1.2 D gap town
- 3.1.3 C dormitory town
- 3.1.4 B settlement classification
- 3.1.5 C the maximum distance people are willing to travel for a service.

- 3.2 3.2.1 An area on the outskirts of an urban area, interface between town and country.

OR

The transition zone where urban and rural uses mix and often clash.

3.2.2 ANY ONE RELEVANT ANSWER

- fertile soil
- good climate
- water nearby
- good access to roads
- relief
- aspect
- building or fuel materials
- historical – defence, tradition
- trade and transport node

3.2.3 ANY TWO RELEVANT ANSWERS

- wind break
- good road
- buildings formal and well built
- structure to the farmland / regular texture indicating monoculture
- large/ extensive farmland
- irrigation system available/ own water source available

3.2.4 ANY TWO RELEVANT ANSWERS

The candidate is expected to **ANALYSE** and should, therefore, expand on and explain each point.

- fewer people to work the land / decreased productivity / decreased food security
- smaller market / economic decline
- more money to be spent on mechanisation
- less opportunity to develop skills
- under-utilisations of services, close down
- decrease in services provided
- isolation increasing vulnerability to crime / increase in crime
- demographic changes / families split up
- poverty
- rural decline and decay

3.2.5 ANY TWO RELEVANT ANSWERS

The candidate is expected to **SUGGEST** and should, therefore, expand on and explain each point.

- create jobs
- develop skills
- keep people in rural areas
- counterurbanisation
- stop people moving to urban areas
- improves infrastructure
- attracts more services into the region
- promotes tourism in area – stimulating the economy
- improved farm productivity/ better methods
- SDIs – improve standard of living in area through economic stimulation

3.3 3.3.1 On the outskirts of an urban area / near industrial areas / open land

3.3.2 ANY ONE RELEVANT ANSWER

The candidate is expected to **DISCUSS** and should, therefore, expand on and explain each point.

- movement of people into urban areas
- nowhere else to go/ formal housing unavailable
- poor/poverty/unemployment resulting in no money for formal housing
- influx of poor foreigners or refugees
- higher birth rates in the settlement

3.3.3 ANY TWO RELEVANT ANSWERS

The candidate is expected to **ASSESS** and should, therefore, expand on and explain each point.

- more infrastructure
- more sanitation
- increase the functions and services available (utilities / formal housing / refuse / sanitation)
- move business to the region (decentralisation)
- tax incentives
- improved education provision / upskilling
- improved security
- better pay / increasing minimum wage
- job creation
- security increases through food gardens or programmes
- microloans for small businesses

3.4 3.4.1 F

3.4.2 D

3.4.3 E

3.4.4 G

3.4.5 B

3.5 3.5.1 (a) 1986: 18 000 – 20 000 km²

(b) 2016: 5000 km²

3.5.2 It has generally decreased / negative correlation to years

3.5.3 ANY ONE RELEVANT ANSWER

The candidate is expected to **EVALUATE** and should, therefore, expand on and explain each point.

- better farming methods, mechanisation
- more fertiliser and pesticides
- more irrigation schemes
- better irrigation methods
- more commercial farmers
- consolidation of farms to use the land and equipment more productively
- GMOs and hybrid seeds

3.5.4 ANY TWO RELEVANT ANSWERS

- used to make bread
- used in most baking products
- used for cereals
- used as the main binding agent in food production (gluten)
- staple diet / nutritious
- food source for humans and animals
- inexpensive to grow
- easy to grow

3.6 3.6.1 (a) Finance, real estate and business services.

(b) Between 70 billion and 80 billion rand.

- 3.6.2
- Hinder
 - lack of water/ drought/ climate change/ unreliable rainfall
 - no mineral resources
 - far from the markets (Gauteng)
 - ageing infrastructure
 - labour issues
 - fluctuating foreign exchange
 - transport-related issues
 - land is expensive
 - load shedding / unreliable power
 - illness/ HIV/AIDs – lowering productivity
 - overpopulated – causing strain on resources and area
 - corruption / crime

 - Promote
 - highly skilled labour/ large labour source
 - harbour
 - good infrastructure
 - access to large markets
 - investor interest
 - abundance of raw materials (agro-processing)
 - nuclear/ alternative power sources
 - tourism promotes link industries
 - water transfer schemes
 - available flat land
 - industrial inertia

3.6.3 The candidate is expected to DISCUSS and should, therefore, expand on and explain each point.

- possibly more unemployment / AR mechanisation
- new possibilities for skilled workers
- economic growth in sectors
- new linked industries
- strikes and protests from unions
- increased productivity and efficiency
- stabilise the economy causing sustainability
- upskilling and education improves
- creates more products to export – increasing foreign exchange
- reducing operational costs (more productive)

Total: 200 marks