



NATIONAL SENIOR CERTIFICATE EXAMINATION
NOVEMBER 2022

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 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.

Marks must be awarded in line with:

- the specific content of the marking guideline or the generic level descriptors for the Question.
- the specific skills defined in the marking guideline or in the generic level descriptors for the Question.
- the standard of response required by a candidate as exemplified by the standardisation scripts.

Marks must be awarded **POSITIVELY**:

- Marks are awarded for correct / valid answers.
- Credit is given for valid answers that go beyond the scope of the syllabus referring to your Senior Sub Examiner or Examiner as appropriate.
- Marks are awarded when candidates clearly demonstrate what they know and can do.
- Marks are not deducted for errors.
- Marks are not deducted for omissions.
- Answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the Question as indicated by the mark scheme. The meaning, however, should be unambiguous.

Rules must be applied consistently, e.g., in situations where candidates have not followed instructions or in the application of generic level descriptors.

Marks should be awarded using the full range of marks defined in the marking guide for the Question; however, the use of the full mark range may be limited according to the quality of the candidate responses seen.

Marks awarded are based solely on the requirements as defined in the marking guidelines.

Marks should not be awarded with grade thresholds or grade descriptors in mind.

When marking higher order question, please use the Essay coding system to make the moderation process more consistent, fair and easier.

Geography Essay Coding

E – Excellent

G – Good

F – Fair

V – Vague

R – Repetitive

I – Irrelevant

SECTION A INTEGRATED QUESTION: THE GQEBERHA REGION AND SUNDAYS RIVER VALLEY			
QUESTION 1 PHYSICAL GEOGRAPHY			
1.1 Geographical Skills			
Study Figure 1 and complete the following questions by selecting the correct answer in each instance. Write the number of the question and the letter corresponding to your answer, for example; 1.1.0 A.			
1.1.1	Determine the bearing from Kirkwood to Gqeberha. A 25° B 65° C 165° D 345°	C 165°	
1.1.2	Calculate the distance from Kirkwood to the port in the Coega Industrial Development Zone (IDZ). A 20 km B 45 km C 100 km D 300 km	C 100 km	
1.1.3	The Ocean A is the ... Ocean A Benguela B Indian C Atlantic D Pacific	B Indian	
1.1.4	The number of visitors per day to the Addo National Park is known as what type of data? A Raster B Vector C Geo D Attribute	D Attribute	
1.1.5	The town of Addo is represented as what type of vector data? A Line B Point C Polygon D Buffer	B Point	

1.2 Mid-latitude cyclones			
Study Figure 2, a synoptic weather map of South Africa			
1.2.1	Link the letters in Figure 2 with the weather features below. Write only the question number and the appropriate letter, for example, (e) A.		
(a)	South Indian High Pressure	E	
(b)	Coastal Low Pressure	D	
(c)	Cold front	B	
(d)	An extended ridge of High Pressure	C	
1.2.2	Name the winds responsible for the fire warning in the Kirkwood region.	Berg winds	There can only be this answer.
1.2.3	Describe how the winds referred to in Question 1.2.2 are formed.	<ul style="list-style-type: none"> • Bergwinds usually occur due to the interaction between the interior high and coastal low pressure. • Air moves from the interior towards the coast. • The air that has been heated on the extensive central plateau flows down the escarpment to the coast and it undergoes further warming by adiabatic processes. 	Give credit for a reasonable and relevant alternative description.
1.2.4	Analyse the effect these winds (Question 1.2.2) have on the businesses and residents of the Sundays River Valley.	<ul style="list-style-type: none"> • Fires, loss of homes and crops • Dry conditions – loss of crops • Loss of livestock due to heat. 	Give credit for a reasonable and relevant alternative analysis.
1.2.5	Explain how feature B is formed.	<ul style="list-style-type: none"> • A cold front forms when a cold air mass pushes into a warmer air mass. Cold fronts can produce dramatic changes in the weather. • Form at the polar front. 	Give credit for a reasonable and relevant alternative explanation.
1.2.6	Name TWO weather conditions that feature B brings to the Western Cape.	<ul style="list-style-type: none"> • Rainfall • Colder temperatures • Cloud cover • Change in wind direction (backing) 	
1.2.7	Name the type of cloud found along feature B.	<ul style="list-style-type: none"> • Cumulonimbus 	

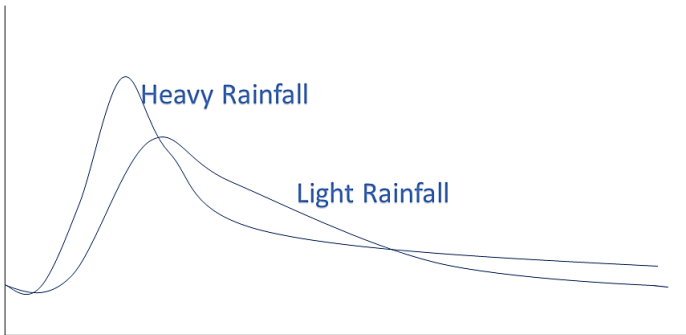
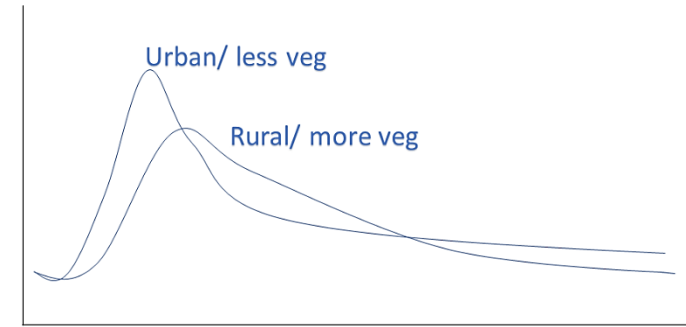
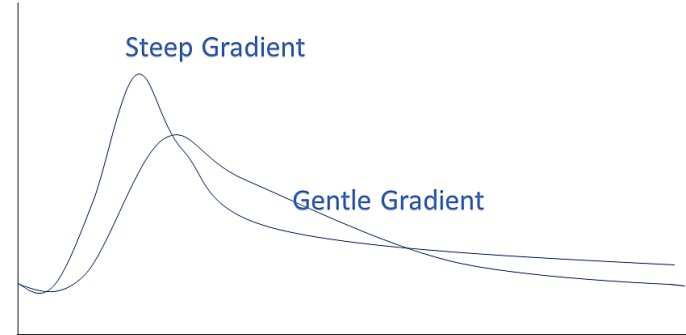
1.2.8	Discuss ONE way in which feature B will disrupt residents in the Western Cape.	<ul style="list-style-type: none"> • Snowfall <ul style="list-style-type: none"> – Transport – Death of animals • Heavy rainfall <ul style="list-style-type: none"> – Transport – Flooding – Loss of homes 	<p>Give credit for a reasonable and relevant alternative discussion.</p> <ul style="list-style-type: none"> • 1 mark if the discussion is superficial and shows general knowledge and understanding. • 2 marks for a developed discussion that covers the content thoroughly.
1.2.9	Evaluate the importance of feature B to the socio-economic wellbeing in the Cape region.	<ul style="list-style-type: none"> • Provides the main water for the region • This helps businesses and farmers • Fills the dams in the region to provide water. 	<p>Give credit for a reasonable and relevant alternative evaluation.</p> <ul style="list-style-type: none"> • 1 to 2 marks for a simple evaluation • 3 to 4 marks for well-developed evaluation come as the depth of explanation, the linking of factors together or the relationship to a specific aspect of a CF.

1.3 Drainage systems in South Africa

Study Figure 3, a map of the Sundays River basin.

1.3.1	Match letters H , I and J with the three terms below to complete the legend for Figure 3. Write only the question number and the appropriate letter, for example, (e) H.		
(a)	Sundays River watershed	J	
(b)	Sundays River system	H	
(c)	Sundays River drainage basin	I	
1.3.2	Name the drainage pattern of the Sundays River system.	Dendritic	
1.3.3	Would you describe the drainage density as low or medium?	medium	

1.3.4	Draw a sketch of the longitudinal profile of the Sundays River from K to L.		
	Your sketch must include:		
	(a) Temporary base level(s) of erosion.		
	(b) Permanente base level of erosion.		
	(c) Stages along the river		
1.3.5	The Sundays River has an ungraded profile. Explain the statement.	<p>There are two dams (knick points) visible along the profile. This makes it ungraded.</p>	<p>Give credit for a reasonable and relevant alternative explanation.</p> <ul style="list-style-type: none"> • 1 mark if the explanation is superficial and shows general knowledge and understanding. • 2 marks for a developed explanation that covers the content thoroughly.

1.3.6	With the aid of a diagram, analyse how the following aspects will affect the shape of a storm hydrograph.			
	(a) Precipitation	The intensity of a storm will obviously impact the peak discharge of the river. More rainwater = more water in the river so a higher discharge.		Give credit for a reasonable and relevant alternative analysis.
	(b) Land use	Humans will normally cover soil in impermeable materials like tarmac or concrete which will increase surface run-off and reduce the amount of water being stored, increasing the peak discharge and reducing the lag time.		Give credit for a reasonable and relevant alternative analysis.
	(c) Gradient	Basins with steep slopes will have a high peak discharge and a short lag time because the water can travel faster downhill.		Give credit for a reasonable and relevant alternative analysis.

QUESTION 2 Human Geography			
2.1 Urban structure and Patterns			
Study Figure 4, a map of the Sundays River Valley.			
2.1.1	Match the words in the block below with the statements provided. Write only the question number and the appropriate word(s), for example, (e) break of bulk		
(a)	Street pattern of Kirkwood	Gridiron	
(b)	Street pattern of Moses Mabida	Unplanned irregular	
(c)	Settlement hierarchy of Kirkwood	Village	
(d)	Kirkwood would be regarded as what type of settlement.	Central Place	
2.1.2	Is Kirkwood a dry- or wet-point settlement?	Wet-point	
2.1.3	Provide an explanation for your answer to Question 2.1.2.	It is found in the flood plain and right on the water source.	Give credit for a reasonable and relevant alternative explanation. <ul style="list-style-type: none"> • 1 mark if the explanation is superficial and shows general knowledge and understanding. • 2 marks for a developed explanation that covers the content thoroughly.
2.1.4	Identify TWO site factors for Kirkwood.	<ul style="list-style-type: none"> • On the canal • On the flood plain • Fertile land • Right on a water source • A road runs through the settlement • The railway runs through the settlement 	Give credit for a reasonable and relevant alternative answer.
2.1.5	Explain how services are linked to the size of a settlement.	The more services, the higher the population and higher populations need more services.	Give credit for a reasonable and relevant alternative explanation. <ul style="list-style-type: none"> • 1 mark if the explanation is superficial and shows general knowledge and understanding. • 2 marks for a developed explanation that covers the content thoroughly.

2.2 Informal Settlements			
Study Figure 5, a graph of the types of dwellings found in Moses Mabida.			
2.2.1	State the percentage of informal dwellings in Moses Mabida.	2%	Read directly off the graph.
2.2.2	Define an <i>informal settlement</i> .	<p>The settlement is made of makeshift and informally built homes with little to no planning.</p> <p>or</p> <p>A grouping of buildings without proper infrastructure or services and amenities (like running water, sanitation and electricity)</p>	Candidates are free to develop their own approach to the question and responses will vary. This does not have to be a textbook explanation.
2.2.3	Why do a significant number of people still live in informal settlements?	<p>This is due to the extent of the poverty or the lack of sufficient formal housing in a region.</p> <p>People come to cities but do not get employed.</p>	<p>Give credit for a reasonable and relevant alternative answer.</p> <ul style="list-style-type: none"> • 1 mark if the response is superficial and shows general knowledge and understanding. • 2 marks for a developed response that covers the content thoroughly.
2.2.4	Assess how the building material used in informal settlements increases the risk from extreme weather conditions.	<ul style="list-style-type: none"> • Most materials are poor quality and very flammable, such as wood and cardboard. • Structures are poorly put together. 	<p>Give credit for a reasonable and relevant alternative assessment.</p> <ul style="list-style-type: none"> • 1 mark if the assessment is superficial and shows general knowledge and understanding. • 2 marks for a developed assessment that covers the content thoroughly.

2.2.5	Describe TWO issues that develop as a result of the growth of informal settlements.	<ul style="list-style-type: none"> • no security of tenure • do not comply with planning and building regulations, • often situated in geographically and environmentally sensitive areas • economic vulnerability and low-paid work • marginalisation • displacement caused by conflict • high crime rates • decrease in property value of surrounding areas • degradations of the environment. • Uncontrolled birth rate 	<p><i>The answer can deal with Physical and/ or population growth.</i> Give credit for a reasonable and relevant alternative description.</p> <ul style="list-style-type: none"> • 1 mark per concept when the response has a superficial description and shows general knowledge and understanding. • 2 marks per concept for a developed description that covers the content thoroughly. • Max 2 marks if only ONE issue is covered.
2.2.6	How can local municipalities reduce the challenges associated with informal settlements?	<ul style="list-style-type: none"> • Create jobs • Build more effective low-cost housing. 	<p>Give credit for a reasonable and relevant alternative answer.</p> <ul style="list-style-type: none"> • 1 mark if the response is superficial and shows general knowledge and understanding. • 2 marks for a developed response that covers the content thoroughly. • May not be a simple list.

2.3 Strategies for Industrial Development

Study Figure 6, an infographic about the Sundays River Citrus Company.

2.3.1	Explain <i>trade balance</i> .	The difference between the value of a country's exports and the value of a country's imports for a given period.	Candidates are free to develop their own approach to the question and responses will vary. This does not have to be a textbook explanation.
2.3.2	Discuss the importance of SRCC in terms of the socio-economic impact on the region.	<ul style="list-style-type: none"> • Creating jobs • Income for the region • Taxes for the region • Foreign exchange • Possible skills upliftment • Development of infrastructure 	<p>Give credit for a reasonable and relevant alternative discussion.</p> <ul style="list-style-type: none"> • 1 mark per concept when the response has a superficial discussion and shows general knowledge and understanding. • 2 marks per concept for a developed discussion that covers the content thoroughly. • Max 2 marks if only ONE factor is covered

QUESTION 3 EXTENDED WRITING**Strategies for Industrial Development**

Please DO NOT tick when marking an essay – this confuses the checkers.

Rather, underline valid and appropriate points and use the code system.

**GEOGRAPHY
ESSAY CODES**

E – Excellent
G – Good
V – Vague
R – Repetition
I – Irrelevant
F – Fair

CONTENT:

_____ Underline relevant points if correct

○ Circle incorrect points

EVIDENCE:

() Bracket evidence

As an advisor to the Gqeberha–Kariega industrial development counsel, you are tasked to write a report explaining the benefits and drawbacks of development in the region, including the Sundays River regions.

Outline the benefits of developing an IDZ and SDI in a region.

- A reduced corporate income tax at the rate of 15%;
- Relief from customs duties on goods imported into the IDZs for storage or materials for manufacture;
- Up to 30% grants on the cost of the plant, machinery, equipment, commercial buildings and vehicles;
- Provide new jobs
- Opportunity for the development of linked industries
- Drive to skill development
- New infrastructure to be built
- Better services for the people

- Give credit for a reasonable and relevant alternative.
- Be careful of repetition in paragraphs.

Assess how the Coega IDZ could aid industries such as the citrus industry around Kirkwood.

- It would provide agri-processing
- Access to the export market
- New cooperation in making business easier
- Less tax paid by selling overseas
- Foreign income to be earned
- Easier to link to port

- Give credit for a reasonable and relevant alternative.
- Be careful of repetition in paragraphs.

Assess the challenges industrial development in the Gqeberha–Kariega region could face.	<ul style="list-style-type: none"> • Far from main consumer areas • Labour costs are higher than in Asia and Eastern Europe for car production • Labour unrest and strikes • Large unskilled labour force • Infrastructure old and underdeveloped (old homelands) • Water issues – drought in the region • Power issues – national grid 	<ul style="list-style-type: none"> • Give credit for a reasonable and relevant alternative. • Be careful of repetition in paragraphs.
Analyse how the Eastern Cape government could drive more development in the region.	<ul style="list-style-type: none"> • Build new infrastructure • Fix and repair old infrastructure • Decentralise the industries • Invest in SDI and IDZ • Find new industries to invest in the region • Upskill the people through education • Work is being done on rail links to the Eastern Cape to enable more manganese to be exported through the province. • These logistics upgrades are an indicator that the political will exists to improve infrastructure. • Targeted new industries, including renewable energy, the oceans economy and tourism. 	<ul style="list-style-type: none"> • Give credit for a reasonable and relevant alternative. • Be careful of repetition in paragraphs.

Criteria	Level 3 Excellent – Good	Level 2 Satisfactory	Level 1 Poor
Writing skills <ul style="list-style-type: none"> Take into consideration structure and presentation. Use of brief introduction and conclusion. Logical discussion and use of subheadings. [4 marks allocated to this component]	<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 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 of / adherence to subheadings. Long sentences, poor grammar and ineffective use of paragraphs. The report is repetitive. Bullet points may have been used.</p> <p><i>1 mark must be awarded for any form of written attempt / effort.</i></p> <p>2–0 marks</p>
Content knowledge <ul style="list-style-type: none"> Correct use of geographical terminology and concepts. Adherence to topic and subheadings. [12 marks allocated to this component]	<p>Response thoroughly assesses the relevant content and detailed discussion of the topic. An effective and sustained evaluation with a sound conclusion. Response is well founded in detailed exemplar knowledge and strong conceptual understanding of the topic. Examples used are appropriate and integrated effectively into the response. Good usage of geographical terminology and concepts. An appropriate number of facts presented per subheading. <u>Min</u> of 2 points for every sub-heading will earn candidate 10 marks. Extension work will provide a further 2 marks.</p> <p>12–9 marks</p>	<p>Response demonstrates some knowledge and understanding. Some relevant content. Response is broadly evaluative in character, comprising some explanatory or narrative content and a conclusion. Response develops from secure base of knowledge and understanding with the use of examples. An overview / general discussion of key issues. Displays a fair understanding of the topic, however, inaccurate or vague in some discussions. Basic usage of geographical concepts and terminology. 60–50% of required facts presented per subheading. 1 point per sub-heading, or 2 points provided and only 2 paragraphs.</p> <p>8–5 marks</p>	<p>Response makes a few general points about the topic. A descriptive response comprising a few simple points. Knowledge is basic and understanding may be poor and lack relevance to the Question set. Digression from the topic. Weak grasp of concepts and terminology. Isolated and generic elements of understanding and knowledge. Superficial / poor discussion. Almost no relevant facts / subheadings.</p> <p>4–0 marks</p>

<p>Supporting evidence – analysis and understanding</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>[4 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 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>2–0 marks</p>
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SECTION B CLIMATE, WEATHER AND GEOMORPHOLOGY			
QUESTION 4 Climate and Weather			
4.1 Climate Terminology			
Select the terms in bold that will make the statements TRUE. Write only the question number and the corresponding term, e.g., 4.1.0 river.			
4.1.1	Smoke and pollution become trapped in a valley due to the formation of a(n) (thunderstorm / inversion layer / frost pocket)	inversion layer	
4.1.2	The warmest slopes in the southern hemisphere are the (south / west / north) facing.	north	
4.1.3	Winds that from a frost pocket at the bottom of a valley are known as (anabatic winds / katabatic winds / föhn winds)	anabatic winds	
4.1.4	The weather condition that brings heavy rains to different regions of South Africa is a (Cape Doctor / cut-off low / berg wind)	cut-off low	
4.2 Tropical Cyclones			
Study Figure 8, a 3-D model of Hurricane Laura, which made landfall along the American Coast.			
4.2.1	Provide a possible name for the next storm to affect the Atlantic region.	Any male name with an M	Understanding the alphabetical name alternating male and female names is a very general concept.
4.2.2	Explain why hurricanes (tropical cyclones) dissipate when they make landfall.	They lose energy because there is no more moisture	Concept question – candidates must be given marks for understanding.
4.2.3	Match the letters M, N and O on Figure 8 with the following features. Write only the question number and the corresponding letter, for example, (d) Z .		
	(a) Eye	M	
	(b) Rainbands	O	
	(c) Eye wall	N	

4.2.4	Explain why the eye has calm and clear conditions.	<ul style="list-style-type: none"> • The suction action produced by the eye gives form and structure to a hurricane. This process creates calm conditions inside the eye and stormy conditions along the eye wall. • In addition to transferring warm air pockets from the upper atmosphere to the eye wall, return air pockets make their way from the eye wall back into the eye. • These return pockets absorb additional moisture from the ocean surface and, in effect, return to the eye wall to further raise the storm's temperature. 	<p>Give credit for a reasonable and relevant alternative explanation.</p> <ul style="list-style-type: none"> • 1 mark if the explanation is superficial and shows general knowledge and understanding. • 2 marks for a developed explanation that covers the content thoroughly.
4.2.5	Explain why regions hit by the leading quadrant would have experienced the most significant impact from Hurricane Laura.	<ul style="list-style-type: none"> • Tropical storm-force winds are strong enough to be dangerous to those caught in them. • Storm surge is an abnormal rise of water generated by a storm's winds. • Storm tide is the water level rise during a storm due to the combination of storm surge and the astronomical tide. • Tropical cyclones often produce widespread, torrential rains in excess of 150 mm, which may result in deadly and destructive floods. • In fact, flooding is the major threat from tropical cyclones for people living inland. • The strong winds of a tropical cyclone can cause dangerous waves that pose a significant hazard to mariners and coastal residents. • When the waves break along the coast, they can produce deadly rip currents - even at large distances from the storm. • Hurricanes and tropical storms can also produce tornadoes. 	<p>Give credit for a reasonable and relevant alternative prediction.</p> <ul style="list-style-type: none"> • 1 to 2 marks for a simple prediction • 3 to 4 marks for well-developed prediction come as the depth of explanation, the linking of factors together or the relationship to a specific aspect of a TC making landfall.

4.3 Subtropical Anticyclones and Associated Weather Conditions			
Study the tweet in Figure 9 below by Gauteng Weather warning people about the potential of poor air conditions over the interior.			
4.3.1	Identify whether poor air conditions are more likely to occur in summer or winter.	Winter	
4.3.2	Provide an explanation for your answer to Question 4.3.1.	During winter, the high pressure over south Africa forms an inversion layer over the country and, therefore, pollution will become concentrated.	The candidate must show an understanding of how high pressure affects air quality over South Africa.
4.3.3	Identify TWO human causes of the high levels of pollution.	<ul style="list-style-type: none"> • Power stations • Cars • Fires • Industrial development 	This can be any TWO reasonable answers. This may be a simple list.
4.4 Urban climates			
Study Figure 10, an isotherm map showing the temperature of the centre of London relative to the temperatures of the surrounding areas.			
4.4.1	Explain why London is warmer than the surrounding areas.	It's the urban heat island caused by urban areas. This is due to the materials used and human activities in an urban area.	Candidates must show an understanding of UHI and what causes them.
4.4.2	Recommend TWO solutions to reduce this temperature range.	<ul style="list-style-type: none"> • More green areas • Environmental laws • Different colours for buildings • Different colours of tar • New and innovative building materials • Decrease pollution • Decrease heating and cooling solutions • Renewable energy solutions 	Give credit for reasonable and relevant alternative recommended solutions. <ul style="list-style-type: none"> • 1 mark per concept when the response has superficial recommended solutions and shows general knowledge and understanding. • 2 marks per concept for developed recommended solutions that thoroughly cover the content. • Max 2 marks if only ONE solution is covered.

QUESTION 5 Geomorphology			
5.1 Fluvial Terminology			
Match the description in Column B with the term in Column A. Write only the question number and the description's corresponding letter, for example. 5.1.0 A.			
5.1.1	Abrasion	F.	The mechanical wearing down of a rock surface by friction from the collision between particles during their transport.
5.1.2	Throughflow	D.	Water movement through the soil by percolation through interconnecting pore spaces.
5.1.3	Antecedent drainage	A.	A drainage system that has maintained its general direction across an area of localised uplift.
5.1.4	Wind gap	H.	An area where a waterway once flowed is now dry due to stream capture.
5.1.5	Baseflow	E.	Sustained, low, or fair-weather streamflow is often primarily derived from groundwater flow.
5.2 Fluvial Processes			
Study Photograph 1 of a river channel in the Drakensberg region.			
5.2.1	Identify the fluvial feature in Photograph 1.	Meander	
5.2.2	Indicate if there is (write only the letter as your answer) ...		
(a)	deposition along the bank at P or Q .	Q	
(b)	erosion along the bank at P or Q .	P	
5.2.3	Explain why hydraulic action will most likely happen at P.	The river will place more pressure on the bank at point P, and the weight and pressure will cause pressure and create hydraulic action as a form of erosion.	Give credit for reasonable and relevant alternatives.
5.2.4	Explain what will happen along the river channel at R.	The river will erode the banks until the river cuts through in a straight line.	Give credit for reasonable and relevant alternatives.
5.2.5	Name the feature that will form after the event referred to in Question 5.2.3.	Oxbow lake	Give credit for reasonable and relevant alternatives.

5.3 Catchment and River Management			
Study Photograph 2 of a weir along the Berg River in Paarl.			
5.3.1	State whether deposition would occur S or T.	T	Concept answer
5.3.2	Identify ONE purpose of building a weir.	<ul style="list-style-type: none"> • measure water flow rate • alter the flow of rivers • prevent flooding • small-size weirs can be used in significant hydropower developments • small weirs can help improve fish numbers, • stabilise water levels • stabilise effects of river alteration 	<p>May be a list</p> <p>Give credit for reasonable and relevant alternative purpose.</p>
5.3.3	Explain how a weir causes rejuvenation along a river course.	Due to the water moving over the weir, the water increases in energy and will cause erosion, giving it rejuvenated characteristics.	Give credit for reasonable and relevant alternative explanation.
5.3.4	Discuss how we use geospatial buffering in river flood management.	It will outline areas that would potentially be flooded, and we can use this for rescue or building.	<p>Give credit for a reasonable and relevant alternative discussion.</p> <ul style="list-style-type: none"> • 1 mark per concept when the response has a superficial discussion and shows general knowledge and understanding. • 2 marks per concept for a developed discussion that covers the content thoroughly.
5.3.5	Assess how we can use geospatial analysis to identify and limit human activity that affects a river system.	<ul style="list-style-type: none"> • data and records about water sources • keeping track of these water conditions • motion characteristics • understand groundwater behaviour and characteristics • geographic features that naturally affect groundwater • studies on a slope 	<p>This is a concept question</p> <p>Candidates need to show an understanding of geospatial data and drainage basin management and how they relate.</p> <p>Give credit for reasonable and relevant alternative assessment.</p> <ul style="list-style-type: none"> • 1–2 marks – The response is mainly descriptive with little assessment of how we can use geospatial data to help us manage a drainage basin and river system. Knowledge

		<ul style="list-style-type: none"> • drainage features • land utilisation patterns • water supply management • stormwater control • flood disaster management 	<p>is primary, and understanding may be inaccurate.</p> <ul style="list-style-type: none"> • <i>If just a list is given with no unpacking (MAX 2 Marks)</i> • 3–4 marks – Response offers some assessment with superficial details on the link between geospatial data and drainage basin management. Response develops on a largely secure base of knowledge and understanding. Examples may lack detail or development. • 5–6 marks – The response clearly assesses how we can use geospatial data to help us manage a drainage basin and river system. There is detailed knowledge and a solid conceptual understanding of the topic. Any examples used are appropriate and integrated effectively into the response.
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SECTION C RURAL AND URBAN SETTLEMENT AND ECONOMIC GEOGRAPHY OF SOUTH AFRICA			
QUESTION 6 Rural and Urban Settlement			
6.1 Rural Settlement			
Study Photograph 3 of a settlement near Magaliesberg, Gauteng.			
Select the correct answer in each instance. Write the number of the question and the letter corresponding to your answer, e.g., 6.1.0 A.			
6.1.1	The settlement in Photograph 3 would be classified as a(n) ... A megalopolis. B village. C isolated farmstead. D city.	C. isolated farmstead	
6.1.2	The farming method for the settlement is ... A subsistence. B small scale. C hydroponic. D commercial.	D. commercial	
6.1.3	Feature labelled U is known as a(n) ... A windbreak. B canal. C windmill. D orchard.	A. windbreak	
6.1.4	This settlement has a ... settlement pattern. A dispersed B nucleated C linear D clustered	A. dispersed	

6.2 Rural Settlement Issues			
Read the article below about the changes in small towns around South Africa.			
6.2.1	Link ONE of the underlined words in the text with the following definitions. Write only the number of the question and the appropriate word(s), for example, (z) Town.		
(a)	Small towns that people migrate to in order to work remotely from there.	'Zoom towns'	
(b)	The act of relocating within a country across provincial boundaries.	semigration	
(c)	Access-controlled residential area with varied amenities, including restaurants and picturesque walkways.	Golf Estate	
6.2.2	Outline TWO reasons for counter-urbanism.	<ul style="list-style-type: none"> • Crime • Congestion • Cost of living • Pollutions • Preserved better lifestyle • Healthier lifestyle 	<p>Give credit for reasonable and relevant alternative outline.</p> <p>1 mark per concept – may be a list.</p>
6.2.3	Evaluate TWO impacts this type of counter-urbanism will have on these towns.	<ul style="list-style-type: none"> • High population • Stress on infrastructure • A rise in property values • Higher taxes • Better-developed infrastructure • More technology • Better services • Services more expensive 	<p>Give credit for reasonable and relevant alternative evaluations.</p> <ul style="list-style-type: none"> • 1 mark when the response has a superficial evaluation and shows general knowledge and understanding. • 2 marks for a developed evaluation that covers the content thoroughly. • Max 2 marks only ONE impact is covered

6.3 Urban Structure and Patterns			
Study Photographs 4 and 5 that show a new development near the Sandton CBD.			
6.3.1	Define a <i>mixed-use development</i> .	A development where you find most needs in one space: eat, sleep and play.	Candidates are free to develop their own approach to the question and responses will vary. This does not have to be a textbook definition.
6.3.2	Why is the CBD the most densified land use?	<ul style="list-style-type: none"> Easier to provide services Total cost is less Fewer taxes charged 	Give credit for a reasonable and relevant alternative.
6.3.3	Discuss ONE factor why construction of tall buildings like these is popular in Sandton.	<ul style="list-style-type: none"> Land value Population density Laws Land taxes Land availability 	Give credit for a reasonable and relevant alternative discussion. <ul style="list-style-type: none"> 1 mark per concept when the response has a superficial discussion and shows general knowledge and understanding. 2 marks per concept for a developed discussion that covers the content thoroughly.

6.4 Urban settlement issues			
Study Figure 11, showing the growth of urban areas across Gauteng.			
6.4.1	Select a word from the block to match each of the statements below. Write only the question number and the appropriate term, for example, (d) megalopolis.		
(a)	The rapid formless expansion of the geographic extent of urban areas.	Urban sprawl	
(b)	Overcrowding on roads causes traffic jams.	Congestion	
(c)	A sizeable urban settlement resulting from towns and cities spreading out and merging together.	Conurbation	

6.4.2	Predict TWO effects that rapid urban growth has on cities.	<ul style="list-style-type: none"> • Water and sanitation • The failure of urban planning • Lack of investment in infrastructure • Development of slums and informal settlements • The problems of poverty, • Increased unemployment • Dependency on cars intensifies noise, traffic. • Increased population - Air pollution • Environmental degradation 	<p>Give credit for a reasonable and relevant alternative.</p> <ul style="list-style-type: none"> • 1 mark per effect when the response has a superficial answer and shows general knowledge and understanding. • 2 marks per effect for a developed answer that covers the content thoroughly. • Max 2 marks only ONE effect is covered
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QUESTION 7 Economy of South Africa			
7.1 Economy true and false			
State whether the statement below is true or false. Write only the question number and whether the statement is true or false.			
7.1.1	Ubiquitous industries are factories found in almost every town across a region.	True	
7.1.2	Food security occurs when there is a lack of food that gives rise to starvation.	False	
7.1.3	Infrastructure refers to the structures and facilities needed for the operation of a society.	True	
7.1.4	A territory behind and bordering a town on a coast or river is known as a break of bulk point.	False	
7.2 Rural Settlement Issues			
Study Figure 12, showing the number of hectares of land redistributed between 1994 and 2016.			
7.2.1	Define <i>land redistribution</i> .	To provide the disadvantaged and the poor with access to land for residential and productive purposes.	Candidates are free to develop their own approach to the question and responses will vary. This does not have to be a textbook definition.
7.2.2	Which year was the most land transferred?	2008	Read directly off the graph.
7.2.3	Discuss the benefits for the communities receiving land through a land claim.	<ul style="list-style-type: none"> Reducing poverty, Expanding rural development, Returning land to its previous owners. Enable more rapid transfer of agricultural land to black beneficiaries. Sustainable production on transferred land by making sure that human capabilities precede land transfer, more upskilling of local communities and small-scale farmers. 	Give credit for a reasonable and relevant alternative discussion. <ul style="list-style-type: none"> 1 mark per benefit when the response has a superficial discussion and shows general knowledge and understanding. 2 marks per benefit for a developed discussion that covers the content thoroughly. Max 2 marks only ONE benefit is covered

7.3 Mining			
Study Figure 13, showing the production volumes of manganese in South Africa between 2015 and 2019.			
7.3.1	Name the province where most of the manganese is mined.	Northern Cape	
7.3.2	State the volume of manganese produced in 2019.	6 500 million tonnes	
7.3.3	Explain the relationship between the production of iron ore and manganese.	Iron and manganese are the primary materials used to manufacture steel.	Give credit for reasonable and relevant alternative answers.
7.3.4	Discuss TWO factors that influence mining in South Africa.	<ul style="list-style-type: none"> • Most minerals exported, dependant on foreign markets and foreign policies – could mean that when the mineral price falls, mining becomes unviable and mines close • Water Problems • Power Problems • Unbeneficiated minerals – secondary sector was slow to develop • Underground water – dangerous, pumping expensive – AMD • Increased salaries since 1994 vs production value • Aids • Strikes/labour unrest • Worker safety • Package for workers expensive • Environmental rehabilitation expensive • Transporting minerals to ports expensive as mines are far inland • Commodity price volatility • Depth of mining, ventilation, access, safety • Ever-increasing costs • Mining Charter compliance • Labour – poor productivity, wage demands & unions 	Give credit for a reasonable and relevant alternative discussion. <ul style="list-style-type: none"> • 1 mark per factor when the response has a superficial discussion and shows general knowledge and understanding. • 2 marks per factor for a developed discussion that covers the content thoroughly. • Max 2 marks if only ONE factor is covered.

		<ul style="list-style-type: none"> • Clustering of strategic minerals • Infrastructure – bulk commodities: Road vs Rail (cost & damage) • Access to critical inputs – Water, energy, steel • Skills development & retention – not a glamorous industry 	
7.3.5	Discuss ONE environmental issue caused by mining Manganese.	<ul style="list-style-type: none"> • Acid mine drainage • Chronic toxicity • Displacement of people • Environmental destruction 	<p>Give credit for a reasonable and relevant alternative discussion.</p> <ul style="list-style-type: none"> • 1 mark per issue when the response has a superficial discussion and shows general knowledge and understanding. • 2 marks per issue for a developed discussion that covers the content thoroughly.
7.4 Informal Sector			
Study Photograph 6 of a trader on the side of the road in a town in South Africa.			
7.4.1	Define the <i>informal sector</i> .	<ul style="list-style-type: none"> • Economic activity that is not regulated by the government. • Business too small to pay taxes 	Candidates are free to develop their own approach to the question and responses will vary. This does not have to be a textbook definition.
7.4.2	Discuss TWO drawbacks faced by people in the informal sector.	<ul style="list-style-type: none"> • Low income • Affected by price increases • No protection • Crime • Laws can drive them out • No designated areas • Affected by weather and climate. 	<p>Give credit for a reasonable and relevant alternative discussion.</p> <ul style="list-style-type: none"> • 1 mark per drawback when the response has a superficial discussion and shows general knowledge and understanding. • 2 marks per drawback for a developed discussion that covers the content thoroughly. • Max 2 marks only ONE drawback is covered

Total: 200 marks