



NATIONAL SENIOR CERTIFICATE EXAMINATION  
MAY 2024

## **GEOGRAPHY: PAPER I**

### **MARKING GUIDELINES**

Time: 3 hours

200 marks

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**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.**

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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 questions, 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

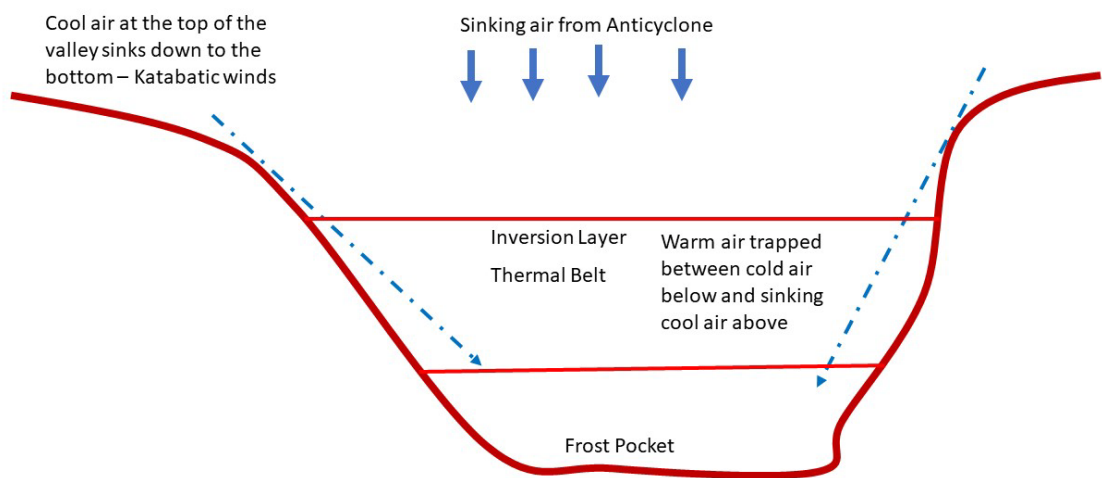
**R** – Repetitive

**I** – Irrelevant

SECTION A INTEGRATED QUESTION: NORTH WEST PROVINCE AND CHROME MINING				
QUESTION 1 PHYSICAL GEOGRAPHY				
1.1 Subtropical Anticyclones and associated weather conditions				
Study Figure 1 and complete the following questions by selecting the correct answer in each instance. Tick the correct answer.				
1.1.1	Figure 1 represents a winter situation because of the ... A low pressure near Angola B high pressure over the interior C tropical cyclone in the Indian Ocean D low pressure over Madagascar		B High pressure over the interior	
1.1.2	The name of system A, which is responsible for the clear conditions over the interior. A South Atlantic High B South Indian High C Kalahari High D Benguela High		C Kalahari High	
1.1.3	The low pressure B near Durban is known as a ... A tropical cyclone B coastal low C low-pressure trough D willy willy		B Coastal low	
1.1.4	The low pressure mentioned in Question 1.1.3 causes winds known as ... A monsoon B berg C chinook D jet streams		B Berg	

1.1.5	The winds mentioned in Question 1.1.4 are warmed up ... A     adiabatically B     katabatically C     following Boyle's law D     by pressure gradient flow		A     Adiabatically	
<b>1.2     City Climate</b>				
Study Figure 2, which shows temperature data for the areas around the town of Brits in the North West Province.				
1.2.1	Identify which of the areas has the ...			
(a)	highest seasonal temperature range.		Brits (Urban)	
(b)	lowest average temperature.		Rheeders Sanddrift (Rural)	
1.2.2	Account for the higher temperature in the urban area of Brits.		Brits is a more urbanised region, so it would have more artificial surfaces, leading to more absorption of insolation and more heat in the area.	<b>Give credit for a reasonable and relevant alternative response.</b> <ul style="list-style-type: none"> <li>• 1 mark if the response is superficial and shows general knowledge and understanding.</li> <li>• 2 marks for a developed response that covers the content thoroughly.</li> </ul>
1.2.3	Explain why the atmospheric pressure in this region is higher in July.		This is due to the high pressure, which brings descending air to the region.	<b>Give credit for a reasonable and relevant alternative response.</b> <ul style="list-style-type: none"> <li>• 1 mark if the response is superficial and shows general knowledge and understanding.</li> <li>• 2 marks for a developed response that covers the content thoroughly.</li> </ul>
1.2.4	Explore the effect atmospheric pressure has on rainfall in the region.		The descending air will restrict the formation of clouds and rain.	<b>Give credit for a reasonable and relevant alternative response.</b> <ul style="list-style-type: none"> <li>• 1 mark if the response is superficial and shows general knowledge and understanding.</li> <li>• 2 marks for a developed response that covers the content thoroughly.</li> </ul>
1.2.5	Evaluate the link between the average temperatures in January and July and the land use in each region.		The more urban a region is, the warmer it is, in both July and January. The range is smaller in the more rural areas.	<b>This is a concept question</b> Candidates need to show an understanding of the concept asked.

				<p><b>Give credit for reasonable and relevant alternative assessment.</b></p> <ul style="list-style-type: none"> <li>• <b>1 mark</b> – The response is mainly descriptive with little assessment of the concept, and their knowledge is primary, and understanding may be inaccurate. <i>If just a list is given with no unpacking (MAX 2 Marks)</i></li> <li>• <b>2 marks</b> – The response offers some assessment with superficial details; their response develops on a largely secure base of knowledge and understanding. Examples may lack detail or development.</li> <li>• <b>3–4 marks</b> – The response shows a clear assessment with detailed knowledge and a solid conceptual understanding of the topic. Any examples used are appropriate and integrated effectively into the response.</li> </ul>
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1.3 Valley Climate				
1.3.1	Which ONE of the slopes would you build on, <b>C or D</b> ?		C	
1.3.2	Explain your answer to Question 1.3.1.		This slope is north facing and that makes it warmer and gets more light.	<p><b>Give credit for a reasonable and relevant alternative response.</b></p> <ul style="list-style-type: none"> <li>• <b>1 mark</b> if the response is superficial and shows general knowledge and understanding.</li> <li>• <b>2 marks</b> for a developed response that covers the content thoroughly.</li> </ul>
1.3.3	Draw a well-labelled diagram of a valley inversion on a clear, cloudless night.			
				

1.4 Fluvial Process				
Study Figure 4, which shows different forms of transportation in a river.				
Study Figure 4 and complete the following questions by selecting the correct answer in each instance. Tick the correct answer.				
1.4.1	The area labelled D is known as the ... A thalweg B river bed C channel D meander		B River bed	
1.4.2	The transport process at E is known as ... A solution B suspension C saltation D traction		D Traction	
1.4.3	What type of erosion is most likely to happen with E? A Hydraulic action B Abrasion C Corrosion D Attrition		D Attrition	
1.4.4	The transport process at F is known as ... A solution B suspension C saltation D traction		B Suspension	
1.4.5	The rate of flow at G is measured in ... A km/h B cumecs C litres D metres per second		B Cumecs	

1.5 Drainage systems in South Africa				
Study Figure 5, a map showing the Hartbeespoort Dam along the Crocodile River and the surrounding urban activities.				
1.5.1	Describe the following characteristics of the Crocodile River south of The Hartbeespoort Dam:			
(a)	Pattern		It is a dendritic pattern	
(b)	Stream density		Medium density	
(c)	Stream order		3rd	
1.5.2	Explain how the Crocodile River became a superimposed river.		The river runs through the Magaliesberg. The mountains formed billions of years ago and were then covered by sedimentary layers. The river then came and flowed over the top of the layers, removing them until it exposed the mountains and cutting right through the mountain without changing its course.	<p><b>This is a concept question</b> Candidates need to show an understanding of the concept asked. <b>Give credit for reasonable and relevant alternative assessment.</b></p> <ul style="list-style-type: none"> <li>• <b>1 mark</b> – The response is mainly descriptive with little assessment of the concept, and their knowledge is primary, and understanding may be inaccurate. <i>If just a list is given with no unpacking (MAX 2 Marks)</i></li> <li>• <b>2 marks</b> – The response offers some assessment with superficial details; their response develops on a largely secure base of knowledge and understanding. Examples may lack detail or development.</li> <li>• <b>3–4 marks</b> – The response shows a clear assessment with detailed knowledge and a solid conceptual understanding of the topic. Any examples used are appropriate and integrated effectively into the response.</li> </ul>



1.6 Catchment and River management			
1.6.1	Why would human activities increase the rate of growth of the hyacinth?	<p><b>Nutrient enrichment:</b></p> <ul style="list-style-type: none"> <li>Human activities such as agricultural runoff, sewage discharge, and industrial waste can introduce excessive nutrients like nitrogen and phosphorus into water bodies.</li> <li>Water hyacinths thrive in nutrient-rich environments, and the abundance of nutrients can stimulate their rapid growth and reproduction.</li> </ul> <p><b>Altered hydrology:</b></p> <ul style="list-style-type: none"> <li>Human alterations to natural water flow patterns, such as dam construction, irrigation systems, and drainage modifications, can create stagnant or slow-moving water bodies.</li> <li>Water hyacinths prefer calm waters and can spread quickly in such conditions, as their floating mats can easily cover the surface.</li> </ul> <p><b>Introduction and spread:</b></p> <ul style="list-style-type: none"> <li>Human activities can inadvertently introduce water hyacinth to new areas. For example, the plant may be transported through boats, fishing gear, or contaminated water sources.</li> <li>Once introduced, water hyacinths can proliferate rapidly, aided by their ability to reproduce vegetatively through stolons and daughter plants.</li> </ul> <p><b>Lack of natural predators:</b></p> <ul style="list-style-type: none"> <li>Human activities can disrupt the natural balance of ecosystems and lead to the decline or removal of native predators or herbivores that would naturally control water hyacinth populations.</li> <li>Without these natural checks, the plant can grow unchecked and dominate water bodies.</li> </ul>	<p><b>Give credit for a reasonable and relevant alternative response.</b></p> <ul style="list-style-type: none"> <li><b>1 mark per concept</b> when the response is superficial and shows basic general knowledge and understanding.</li> <li><b>2 marks per concept</b> for a well-developed response that covers the content thoroughly.</li> </ul> <p>Max 2 marks if only ONE issue is covered.</p>

1.6.2	Analyse some of the impacts humans have on dams and river systems.	<ul style="list-style-type: none"> <li>• <b>Habitat destruction and alteration:</b> Human activities such as dam construction, channelisation, and urbanisation can alter the natural flow and physical characteristics of a river, including its depth, width, and velocity.</li> </ul> <p><b>Water quality degradation:</b></p> <ul style="list-style-type: none"> <li>• Human activities such as industrial and agricultural runoff, sewage discharge, and littering can pollute river water, decreasing water quality and causing health risks for humans and aquatic life.</li> </ul> <p><b>Overfishing and introduction of invasive species:</b></p> <ul style="list-style-type: none"> <li>• Overfishing and introducing non-native species can disrupt the natural balance of a river ecosystem, leading to the decline of native species and the spread of invasive species.</li> </ul> <p><b>Climate change impacts:</b></p> <ul style="list-style-type: none"> <li>• Climate change can affect river systems by altering river flows, water temperatures, and precipitation patterns.</li> </ul> <p><b>Water extraction:</b></p> <ul style="list-style-type: none"> <li>• Human activities such as irrigation, water supply for urban areas, and hydroelectric power generation can lead to water extraction from rivers, reducing water levels and flows, and impacting aquatic habitats and species.</li> </ul> <p><b>Land-use changes:</b></p> <ul style="list-style-type: none"> <li>• Human activities such as deforestation and agriculture can increase soil erosion and sedimentation in rivers, leading to water quality, flow, and habitat changes.</li> </ul>	<p><b>This is a concept question</b> Candidates need to show an understanding of the concept asked. <b>Give credit for reasonable and relevant alternative assessment.</b></p> <ul style="list-style-type: none"> <li>• <b>1 mark</b> – The response is mainly descriptive with little assessment of the concept, and their knowledge is primary, and understanding may be inaccurate. <i>If just a list is given with no unpacking (MAX 2 Marks)</i></li> <li>• <b>2 marks</b> – The response offers some assessment with superficial details; their response develops on a largely secure base of knowledge and understanding. Examples may lack detail or development.</li> <li>• <b>3–4 marks</b> – The response shows a clear assessment with detailed knowledge and a solid conceptual understanding of the topic. Any examples used are appropriate and integrated effectively into the response.</li> </ul>
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1.6.3	Explore TWO ways to decrease human impact on a river system.	<p><b>Implementing Sustainable Agriculture Practices:</b></p> <ul style="list-style-type: none"> <li>• Agricultural activities can have a significant impact on river systems through the use of fertilisers, pesticides, and irrigation. To decrease this impact, sustainable agriculture practices can be adopted.</li> <li>• Precision Agriculture: Employing precision agriculture techniques, such as using GPS-guided machinery and remote sensing technologies, allows farmers to precisely apply fertilisers and pesticides only where and when they are needed. This reduces the excess runoff of chemicals into nearby rivers and minimises water pollution.</li> </ul> <p><b>Conservation Tillage:</b></p> <ul style="list-style-type: none"> <li>• Implementing conservation tillage methods, such as no-till or reduced tillage, helps to prevent soil erosion and nutrient runoff.</li> <li>• By leaving crop residues on the fields, soil erosion is minimised, which, in turn, reduces sedimentation and nutrient loading in rivers.</li> </ul> <p><b>Riparian Buffer Zones:</b></p> <ul style="list-style-type: none"> <li>• Establishing riparian buffer zones along the riverbanks involves planting native vegetation that acts as a natural filter, trapping sediment and absorbing excess nutrients before they reach the water.</li> <li>• This helps to protect the river ecosystem and improve water quality.</li> </ul> <p><b>Implementing Water Conservation Measures:</b></p> <ul style="list-style-type: none"> <li>• Water extraction and usage can have detrimental effects on river systems, especially during periods of drought.</li> </ul> <p><b>Efficient Irrigation Systems:</b></p> <ul style="list-style-type: none"> <li>• Encouraging the use of modern irrigation techniques such as drip irrigation or precision sprinklers helps minimise water</li> </ul>	<p><b>Give credit for reasonable and relevant alternative assessment.</b></p> <ul style="list-style-type: none"> <li>• <b>1 mark</b> – The response is mainly descriptive with little assessment of the concept, and their knowledge is primary, and understanding may be inaccurate. <i>If just a list is given with no unpacking (MAX 2 Marks)</i></li> <li>• <b>2 marks</b> – The response offers some assessment with superficial details; their response develops on a largely secure base of knowledge and understanding. Examples may lack detail or development.</li> <li>• <b>3–4 marks</b> – The response shows a clear assessment with detailed knowledge and a solid conceptual understanding of the topic. Any examples used are appropriate and integrated effectively into the response.</li> </ul>
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			<p>wastage by delivering water directly to plant roots.</p> <ul style="list-style-type: none"> <li>• This reduces excessive water consumption and minimises the amount of water withdrawn from rivers.</li> </ul> <p><b>Water Recycling and Reuse:</b></p> <ul style="list-style-type: none"> <li>• Implementing water recycling and reuse systems can reduce the demand for fresh water from rivers.</li> <li>• Wastewater treatment plants can treat and purify water for non-potable uses like irrigation, industrial processes, or groundwater recharge, reducing the strain on river water resources.</li> </ul> <p><b>Public Education and Awareness:</b></p> <ul style="list-style-type: none"> <li>• Raising awareness about the importance of water conservation and encouraging responsible water use through public education campaigns can significantly reduce water consumption.</li> <li>• Educating communities about the value of rivers and their ecosystems fosters a sense of stewardship and encourages individuals to take actions that minimise their impact on rivers.</li> </ul>	
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QUESTION 2 HUMAN GEOGRAPHY				
2.1 Settlement Terminology				
Match the description in Column B with the term in Column A. Write only the description's corresponding letter in the space below.				
2.1.1	Land use planning		<b>G</b> The process of determining how land should be used.	
2.1.2	Rural-urban migration		<b>D</b> The movement of people from rural to urban areas.	
2.1.3	Village		<b>F</b> A small, rural settlement typically consists of homes and farm buildings.	
2.1.4	Linear rural settlements		<b>A</b> The linear form comprises buildings along a road, river, dike, or seacoast.	
2.2 Urban structure and patterns				
Study Figure 6, an infographic showing the population, average annual income and percentage of informal dwellings of six different regions.				
2.2.1	Explain <i>informal dwellings</i> .		Settlements often build their homes using materials that are easily accessible and affordable, such as corrugated metal sheets, plywood, and plastic.	
2.2.2	Which of the settlement areas has the ...			
(a)	highest annual income?		Orbits	
(b)	largest population?		Damonsville	
2.2.3	Assess the relationship between the average annual income and the percentage of informal dwellings.		The higher the income in an area, the fewer informal dwellings. This is due to the fact that people then have more access to formal housing due to their income levels.	<p><b>This is a concept question</b> Candidates need to show an understanding of the concept asked. <b>Give credit for reasonable and relevant alternative assessment.</b></p> <ul style="list-style-type: none"> <li><b>1 mark</b> – The response is mainly descriptive with little assessment of the concept, and their knowledge is primary, and understanding may be inaccurate. <i>If just a list is given with no unpacking (MAX 2 Marks)</i></li> </ul>

				<ul style="list-style-type: none"> <li>• <b>2 marks</b> – The response offers some assessment with superficial details; their response develops on a largely secure base of knowledge and understanding. Examples may lack detail or development.</li> <li>• <b>3–4 marks</b> – The response shows a clear assessment with detailed knowledge and a solid conceptual understanding of the topic. Any examples used are appropriate and integrated effectively into the response.</li> </ul>
2.2.4	Study Figure 6 on page 14.			
(a)	Explore evidence that proves Brits was an apartheid-planned town.		The main town and industrial areas are away from the more informal areas, and there is a distinct buffer zone between the informal and formal areas.	<p><b>This is a concept question</b> Candidates need to show an understanding of the concept asked. <b>Give credit for reasonable and relevant alternative assessment.</b></p> <ul style="list-style-type: none"> <li>• <b>1 mark</b> – The Response is mainly descriptive with little assessment of the concept, and their knowledge is primary, and understanding may be inaccurate. <i>If just a list is given with no unpacking (MAX 2 Marks)</i></li> <li>• <b>2 marks</b> – The response offers some assessment with superficial details; their response develops on a largely secure base of knowledge and understanding. Examples may lack detail or development.</li> <li>• <b>3–4 marks</b> – The response shows a clear assessment with detailed knowledge and a solid conceptual understanding of the topic. Any examples used are appropriate and integrated effectively into the response.</li> </ul>




(b)	Brits, like most towns, deals with migration of people. Describe:		
(i)	one reason for centrifugal movement.	<p><b>Lack of job opportunities:</b></p> <ul style="list-style-type: none"> <li>If the town does not have enough employment opportunities, people may move to other towns or cities in search of better job prospects.</li> </ul> <p><b>Poor infrastructure:</b></p> <ul style="list-style-type: none"> <li>If the town lacks adequate infrastructure such as roads, schools, hospitals, and other essential services, people may move to other places where these facilities are available.</li> </ul> <p><b>High crime rates:</b></p> <ul style="list-style-type: none"> <li>High levels of crime and insecurity in the town may lead to people moving away to places where they feel safer.</li> </ul> <p><b>Environmental factors:</b></p> <ul style="list-style-type: none"> <li>Factors such as natural disasters or pollution may lead people to move away from the town to safer and healthier environments.</li> </ul> <p><b>Social and cultural factors:</b></p> <ul style="list-style-type: none"> <li>Factors such as discrimination, social isolation, or lack of cultural activities may lead people to move away from the town in search of better social and cultural experiences.</li> </ul>	<p><b>Give credit for a reasonable and relevant alternative response.</b></p> <ul style="list-style-type: none"> <li><b>1 mark</b> if the response is superficial and shows general knowledge and understanding.</li> <li><b>2 marks</b> for a developed response that covers the content thoroughly.</li> </ul>
(ii)	one reason for centripetal movement.	<p><b>Employment opportunities:</b></p> <ul style="list-style-type: none"> <li>If the town has a thriving economy and job opportunities, people may move to the town in search of employment.</li> </ul> <p><b>Affordable housing:</b></p> <ul style="list-style-type: none"> <li>If the town has affordable housing, people may move to the town to take advantage of lower housing costs.</li> </ul>	<p><b>Give credit for a reasonable and relevant alternative response.</b></p> <ul style="list-style-type: none"> <li><b>1 mark</b> if the response is superficial and shows general knowledge and understanding.</li> <li><b>2 marks</b> for a developed response that covers the content thoroughly.</li> </ul>

		<p><b>Access to essential services:</b></p> <ul style="list-style-type: none"> <li>If the town has adequate infrastructure and essential services such as healthcare, education, and transportation, people may move to the town for these services.</li> </ul> <p><b>Lifestyle and cultural factors:</b></p> <ul style="list-style-type: none"> <li>If the town has a vibrant cultural scene, recreational activities, or a desirable lifestyle, people may move to the town for these reasons.</li> </ul> <p><b>Proximity to other cities and towns:</b></p> <ul style="list-style-type: none"> <li>If the town is located in a strategic location that provides easy access to other cities and towns, people may move to the town for convenience and accessibility.</li> </ul>	
(c)	Formulate how to use geospatial analysis to create urban management strategies to help develop and grow the town of Brits.	<p>Geospatial analysis involves using geographic data and tools to analyse and understand the relationships between various elements of the built environment. This data can come from various sources such as satellite imagery, aerial photography, and ground-based surveys. The output of geospatial analysis can then be used to inform and support the creation of urban management strategies.</p> <p>To create an effective urban management strategy for the town of Brits, several steps could be taken:</p> <p><b>Data Collection:</b> Start by gathering data on the current state of the town. This can include data on population demographics, land use, infrastructure, and economic activity.</p> <p><b>Data Analysis:</b> Use geospatial tools to analyse the data collected. For example,</p>	<p><b>This is a concept question</b> Candidates need to show an understanding of concept being assessed.</p> <p><b>Give credit for reasonable and relevant alternative assessment.</b></p> <ul style="list-style-type: none"> <li><b>1–2 marks</b> – The response is mainly descriptive with little assessment of the concept. Knowledge is primary, and understanding may be inaccurate. <i>If just a list is given with no unpacking (MAX 2 Marks)</i></li> <li><b>3–4 marks</b> – The response offers some assessment with superficial details on the concept. The response develops on a largely secure base of knowledge and understanding. Examples may lack detail or development.</li> </ul>



		<p>population density maps can be created to understand where the highest concentration of people are located, while land use maps can be used to identify areas of the town that are underutilised or in need of development.</p> <p><b>Identify Key Issues:</b> Based on the data analysis, identify the key issues that need to be addressed in order to develop and grow the town of Brits. This can include problems such as traffic congestion, lack of affordable housing, and underdeveloped areas.</p> <p><b>Develop Strategies:</b> Based on the key issues identified, develop strategies to address them. For example, an approach to address traffic congestion could involve improving public transportation options and creating new pedestrian and bike-friendly infrastructure. A plan to address the lack of affordable housing could include incentives for developers to build new housing units or create a housing development program.</p> <p><b>Implementation:</b> Finally, implement the strategies developed. This can involve working with local government agencies, community groups, and private sector partners to implement the strategies. In conclusion, geospatial analysis can play an important role in the creation of effective urban management strategies. By using geographic data and tools to understand the built environment, strategies can be developed that address the specific needs and challenges of the town of Brits, and help to drive its growth and development.</p>	<ul style="list-style-type: none"> <li>• <b>5–6 marks</b> – The response clearly assesses the concept and there is detailed knowledge and a solid conceptual understanding of the topic. Any examples used are appropriate and integrated effectively into the response.</li> </ul>
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2.3 Informal sector				
Study Photograph 1 of an informal trader in the Brits area.				
2.3.1	Select the bold term(s) that will make the statements TRUE. Circle the correct answer.			
	The informal trader in Photograph 1 ...			
(a)	mainly sells ( <b>lower / middle / high</b> ) order goods.		<b>lower</b>	
(b)	will have a ( <b>small / medium / large</b> ) sphere of influence.		<b>small</b>	
(c)	needs a ( <b>small / medium / large</b> ) threshold population.		<b>small</b>	
2.3.2	List TWO daily issues that the trader experiences.		<ul style="list-style-type: none"> <li>• Face stiff competition.</li> <li>• Difficult to attract and retain customers.</li> <li>• Limited access to finance.</li> <li>• Difficult to expand their businesses or invest in new equipment or stock.</li> <li>• Lack of infrastructure.</li> <li>• Inadequate storage facilities.</li> <li>• Limited access to water and sanitation facilities.</li> <li>• Safety and security concerns.</li> <li>• Often face regulatory challenges.</li> <li>• Sell goods that are subject to seasonal fluctuations.</li> <li>• Difficult to maintain a steady income throughout the year.</li> <li>• Lack of access to training and support.</li> <li>• Experience unpredictable income streams.</li> </ul>	<b>Give credit for a reasonable and relevant alternative answer.</b>

QUESTION 3			EXTENDED WRITING						
<p>Please DO NOT tick when marking an essay – this confuses the checkers.</p> <p>Rather, underline valid and appropriate points and use the code system.</p>		<table><tr><td><p>GEOGRAPHY ESSAY CODES</p><p>E – Excellent G – Good V – Vague R – Repetition I – Irrelevant F – Fair</p></td><td><p>CONTENT:</p><p>_____ Underline relevant points if correct</p><p> Circle incorrect points</p><p>EVIDENCE:</p><p>( ) Bracket evidence</p></td></tr></table>				<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>		
<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>								
<p>Read Fact File 1, about chrome mining in South Africa. Study Figure 7, a graph showing the production of chrome between 2010 and 2021, and Figure 8, a map showing the main chrome mining areas of South Africa.</p>									
<p>Use Fact File 1, Figures 7 and 8, and any Figure or resource in Section A to answer the question.</p>									
<p>The Department of Mineral Resources and Energy has asked you to write a report on chrome mining near Brits and greater South Africa. In your report, you need to explore the following aspects.</p>									
<p>The main uses and linked industries.</p>		<table><tr><td><ul style="list-style-type: none"><li>• Chrome is primarily used in the production of stainless steel, which is used in a wide range of industries including construction, automotive, aerospace, and electronics. In addition, chrome is used in the production of chemicals, pigments, and refractory materials.</li><li>• The linked industries to chrome mining include steel production, manufacturing, and construction.</li><li>• The production of stainless steel, which is the primary use of chrome, is a major contributor to the manufacturing and construction industries.</li><li>• Other industries that rely on chrome include mining, energy, and chemicals.</li></ul></td><td colspan="3"><ul style="list-style-type: none"><li>• Give credit for a reasonable and relevant alternative.</li><li>• Be careful of repetition in paragraphs.</li></ul></td></tr></table>				<ul style="list-style-type: none"><li>• Chrome is primarily used in the production of stainless steel, which is used in a wide range of industries including construction, automotive, aerospace, and electronics. In addition, chrome is used in the production of chemicals, pigments, and refractory materials.</li><li>• The linked industries to chrome mining include steel production, manufacturing, and construction.</li><li>• The production of stainless steel, which is the primary use of chrome, is a major contributor to the manufacturing and construction industries.</li><li>• Other industries that rely on chrome include mining, energy, and chemicals.</li></ul>	<ul style="list-style-type: none"><li>• Give credit for a reasonable and relevant alternative.</li><li>• Be careful of repetition in paragraphs.</li></ul>		
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<p>The limitations experienced by the chrome mining sector.</p>	<ul style="list-style-type: none"> <li>Declining demand for chrome due to a shift towards alternative materials and changes in consumer preferences.</li> <li>Environmental concerns related to the impact of mining activities on local ecosystems and water resources.</li> <li>Limited access to financing and investment due to the perception that chrome mining is high-risk and lack of government support.</li> <li>High operating costs, including energy and labour costs, affect mining operations' profitability.</li> </ul>	<ul style="list-style-type: none"> <li>Give credit for a reasonable and relevant alternative.</li> <li>Be careful of repetition in paragraphs.</li> </ul>
<p>How chrome mining benefits Brits and South Africa.</p>	<ul style="list-style-type: none"> <li>Job creation: Chrome mining provides employment opportunities for local communities, particularly in rural areas with limited job opportunities.</li> <li>Export revenue: Chrome is one of South Africa's most valuable mineral exports, and the country is the world's largest chrome producer, accounting for around 60% of global production.</li> <li>In infrastructure development, education, and healthcare, leading to economic growth and poverty reduction.</li> <li>Technology transfer: The mining industry brings new technologies and skills to the country, which can be used in other industries to improve productivity and competitiveness.</li> </ul>	<ul style="list-style-type: none"> <li>Give credit for a reasonable and relevant alternative.</li> <li>Be careful of repetition in paragraphs.</li> </ul>

<p>How <u>beneficiation</u> of chrome can grow the economy of South Africa.</p>	<ul style="list-style-type: none"> <li>• The beneficiation of chrome is the process of adding value to raw chrome ore by processing it into a product that can be used in a variety of industries. Beneficiation can contribute to the growth of the South African economy by: <ul style="list-style-type: none"> <li>– Increasing revenue: The beneficiation of chrome creates a higher-value product, which can be sold at a higher price, increasing revenue for the country.</li> <li>– Job creation: The beneficiation process requires skilled labour, creating employment opportunities for local communities.</li> <li>– Diversification of the economy: Beneficiation can lead to the development of new industries that use chrome products, leading to economic diversification.</li> <li>– Increased competitiveness: The beneficiation of chrome can improve the competitiveness of South African products in international markets, leading to increased exports and economic growth.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Give credit for a reasonable and relevant alternative.</li> <li>• Be careful of repetition in paragraphs.</li> </ul>
	<p><b><i>Note: You may draw on any examples you have studied to support your report discussion. Use the rubric below to guide the planning and structure of your report.</i></b></p>	

Criteria	Level 3 Excellent – Good	Level 2 Satisfactory	Level 1 Poor
<b>Writing skills</b> <ul style="list-style-type: none"> <li>Take into consideration structure and presentation.</li> <li>Use of brief introduction and conclusion.</li> <li>Logical discussion and use of subheadings.</li> </ul> <b>[4 marks allocated to this component]</b>	<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><b>4 marks</b></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><b>3 marks</b></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. <i>1 mark must be awarded for any form of written attempt / effort.</i></p> <p><b>2–0 marks</b></p>
<b>Content knowledge</b> <ul style="list-style-type: none"> <li>Correct use of geographical terminology and concepts.</li> <li>Adherence to topic and subheadings.</li> </ul>	<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>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 subheading, or 2 points provided and only 2 paragraphs.</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><b><i>Supporting evidence – analysis and understanding</i></b></p> <ul style="list-style-type: none"> <li>• The ability to analyse and evaluate the topic is assessed in this category.</li> <li>• Reference made to case study material / fact file / source material provided.</li> <li>• If appropriate, reference must be made to familiar / local or other examples.</li> </ul>	<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>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>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>
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SECTION B PHYSICAL GEOGRAPHY				
QUESTION 4 CLIMATE AND WEATHER				
4.1 Subtropical anticyclones and associated weather conditions				
4.1.1	Link the letters in Figure 9 with the weather features below. Write only the corresponding letter in the space provided.			
(a)	The system creates conditions to form a valley inversion.		J	
(b)	The cyclone is known as a Family.		I	
(c)	The system responsible for the Cape Doctor.		K	
(d)	Bringing heavy rains and strong winds over to the Western Cape.		H	
4.1.2	Below is a sketch of a cross-section of front <b>H</b> .			
	Select the correct term(s) in the box below to label the diagram.		<b>L – Cold Air</b> <b>M – Cumulonimbus Clouds</b> <b>N – Warm Sector</b>	
4.1.3	Discuss the impact of the Benguela and Agulhas currents on South Africa.		<b>The Benguela Current</b> <ul style="list-style-type: none"> <li>• Flows northwards along the western coast of South Africa from the Antarctic region.</li> <li>• Moderates effect on the climate along the west coast of South Africa.</li> <li>• Leads to cooler temperatures and low rainfall.</li> <li>• The cold water also leads to the formation of coastal fog and mist, which can have a significant impact on the agricultural productivity of the region.</li> <li>• Creates a semi-arid climate along the west coast, which limits the type of vegetation that can grow in the area.</li> </ul>	<b>This is a concept question</b> Candidates need to show an understanding of the concept asked. <b>Give credit for reasonable and relevant alternative assessment.</b> <ul style="list-style-type: none"> <li>• <b>1 mark</b> – The response is mainly descriptive with little assessment of the concept, and their knowledge is primary, and understanding may be inaccurate.  <i>If just a list is given with no unpacking (MAX 2 Marks)</i></li> <li>• <b>2 marks</b> – The response offers some assessment with superficial details; their response develops on a largely secure base of knowledge and understanding. Examples may lack detail or development.</li> <li>• <b>3–4 marks</b> – The response shows a clear assessment with detailed</li> </ul>



				knowledge and a solid conceptual understanding of the topic. Any examples used are appropriate and integrated effectively into the response.
			<p><b>The Agulhas Current</b></p> <ul style="list-style-type: none"> <li>• Flows southwards along the east coast of South Africa, bringing warm, salty water into the South Atlantic.</li> <li>• This has a moderating effect on the climate along the east coast of South Africa.</li> <li>• Leads to higher temperatures and more rainfall than the west coast.</li> </ul> <p>The interaction of the Benguela and Agulhas currents is also important in shaping the climate of South Africa. The two currents meet at the southern tip of Africa.</p> <p>The interaction of the warm and cold water creates a unique microclimate that can impact the region's weather patterns, including the frequency and intensity of storms.</p>	
4.1.4	List TWO ways that this chart will look different in summer.		<ul style="list-style-type: none"> <li>• Low-pressure trough</li> <li>• Tropical cyclone</li> <li>• SAHP ridging south of the country</li> <li>• Warm temperature</li> </ul>	<b>Give credit for a reasonable and relevant alternative answer.</b>
<b>4.2 Tropical cyclone</b>				
Study Figure 10, a synoptic chart extract of tropical cyclone Freddy making landfall over Madagascar.				
4.2.1	List TWO possible conditions people in Madagascar will experience as the storm makes landfall.		<ul style="list-style-type: none"> <li>• Heavy rainfall</li> <li>• Strong winds</li> <li>• Storm surges</li> <li>• Flooding</li> </ul>	<b>Give credit for a reasonable and relevant alternative answer.</b>
4.2.2	List TWO of the six requirements that a tropical cyclone needs to form.		<ul style="list-style-type: none"> <li>• Ocean 27°C plus</li> <li>• Very little surface friction</li> <li>• Strong upper air divergence/Jet stream</li> </ul>	<b>Give credit for a reasonable and relevant alternative answer.</b>

			<ul style="list-style-type: none"> <li>• 5°–25° N/S of equator</li> <li>• Coriolis force</li> <li>• Very low pressure – (steep pressure gradient)</li> <li>• Unstable air</li> <li>• High humidity</li> <li>• Low wind shear</li> </ul>	
4.2.3	Predict what will happen to the storm when it moves over Madagascar.		<ul style="list-style-type: none"> <li>• Madagascar's high terrain can disrupt the circulation of the storm and potentially weaken it by interfering with the inflow and outflow of moisture and air. This is especially true if the cyclone is a small and compact storm.</li> <li>• However, if the storm is larger in size, it may be able to maintain its intensity and structure despite the disruption caused by the terrain.</li> <li>• Wind shear occurs when winds blow at different speeds and directions at different heights, and it can cause the storm to weaken or even dissipate if it is too strong. If the wind shear is weak, then the storm may be able to maintain its intensity or even strengthen.</li> <li>• The sea surface temperature around Madagascar is also an important factor. If the storm moves over a region with warm sea surface temperatures, it can provide the energy that the storm needs to intensify.</li> <li>• The sea surface temperature is cooler, it can limit the storm's ability to intensify.</li> </ul>	<p><b>This is a concept question</b> Candidates need to show an understanding of the concept asked. <b>Give credit for reasonable and relevant alternative assessment.</b></p> <ul style="list-style-type: none"> <li>• <b>1 mark</b> – The response is mainly descriptive with little assessment of the concept, and their knowledge is primary, and understanding may be inaccurate. <i>If just a list is given with no unpacking (MAX 2 Marks)</i></li> <li>• <b>2 marks</b> – The response offers some assessment with superficial details; their response develops on a largely secure base of knowledge and understanding. Examples may lack detail or development.</li> <li>• <b>3–4 marks</b> – The response shows a clear assessment with detailed knowledge and a solid conceptual understanding of the topic. Any examples used are appropriate and integrated effectively into the response.</li> </ul>
4.2.4	Discuss TWO precautions that people in Madagascar can take to decrease the impact of the storm.		<ul style="list-style-type: none"> <li>• <b>Stay informed:</b> Pay attention to weather forecasts, updates, and warnings issued by local authorities, meteorological services, or disaster</li> </ul>	<p><b>Give credit for reasonable and relevant alternative assessment.</b></p> <ul style="list-style-type: none"> <li>• <b>1 mark</b> – The response is mainly descriptive with little assessment of</li> </ul>

			<p>management agencies. Stay tuned to radio, TV, or reliable online sources for the latest information.</p> <ul style="list-style-type: none"> <li>• <b>Evacuation planning:</b> If you live in a high-risk area prone to cyclones, know the evacuation routes and shelters designated by local authorities. Plan and practice an evacuation strategy with your family, including a designated meeting point in case you get separated.</li> <li>• <b>Secure your property:</b> Before a cyclone strikes, secure loose objects around your property that could become projectiles in high winds. Trim trees and branches to minimise the risk of them falling onto structures. Reinforce doors, windows, and roofs to make them more resistant to strong winds.</li> <li>• <b>Stock up on supplies:</b> Have a well-stocked emergency kit that includes essential items such as non-perishable food, drinking water, battery-powered flashlights, a first aid kit, extra batteries, a portable radio, a manual can opener, and necessary medications. Aim to have enough supplies to sustain your household for at least three days.</li> <li>• <b>Create a communication plan:</b> Establish a communication plan with your family and friends, especially if you get separated during the cyclone. Share contact information and designate an out-of-area contact person who can relay messages if local communication networks are disrupted.</li> </ul>	<p>the concept, and their knowledge is primary, and understanding may be inaccurate.</p> <p><i>If just a list is given with no unpacking (MAX 2 Marks)</i></p> <ul style="list-style-type: none"> <li>• <b>2 marks</b> – The response offers some assessment with superficial details; their response develops on a largely secure base of knowledge and understanding. Examples may lack detail or development.</li> <li>• <b>3–4 marks</b> – The response shows a clear assessment with detailed knowledge and a solid conceptual understanding of the topic. Any examples used are appropriate and integrated effectively into the response.</li> </ul>
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			<ul style="list-style-type: none"> <li>• <b>Follow evacuation orders:</b> If local authorities issue evacuation orders, follow them promptly. Evacuate to the designated shelters or safer areas as instructed, prioritising your safety and the safety of your family members.</li> <li>• <b>Avoid flooded areas:</b> After the cyclone passes, be cautious of potential flooding and avoid walking or driving through flooded streets or areas. Floodwaters can be deceptive, hiding dangers such as submerged objects, open manholes, or swift currents.</li> <li>• <b>Be mindful of health risks:</b> In the aftermath of a cyclone, there may be health risks such as contaminated water sources, damaged sanitation systems, and the spread of waterborne diseases. Take precautions to ensure safe drinking water and maintain proper hygiene practices.</li> <li>• <b>Stay away from damaged structures:</b> Be cautious around damaged buildings, structures, and power lines. They may be unstable and pose risks of collapse or electric shock. Wait for professionals to assess and repair such structures before entering or using them.</li> <li>• <b>Support local response efforts:</b> If you are able, contribute to local response and recovery efforts by volunteering or donating to reputable organisations involved in disaster relief. This can help support the affected communities in their recovery process.</li> </ul>	
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QUESTION 5 FLUVIAL GEOGRAPHY			
5.1 Fluvial processes			
5.1.1	Select the bold term(s) that will make the statements TRUE. Circle the correct answer.		
(a)	Photograph 2 shows the river is flowing in the ( <b>lower</b> / middle / upper) course.	<b>lower</b>	
(b)	Feature L is known as a ( <b>spur</b> / waterfall / levee).	<b>spur</b>	
(c)	The bank labelled M is the ( <b>undercut</b> / slip-off / yazoo).	<b>slip-off</b>	
(d)	The main process that happens at M is ( <b>transport</b> / erosion / deposition).	<b>deposition</b>	
5.2 Drainage systems in South Africa			
Study Figure 11, which shows a secondary drainage region in the upper reaches of the Thukela River system.			
5.2.1	Name TWO ways water gets into the river system.	<ul style="list-style-type: none"> <li>• <b>Precipitation:</b> Precipitation can either fall directly into the river or soak into the ground and then flow into the river as groundwater.</li> <li>• <b>Runoff:</b> Surface runoff from urban areas, as well as runoff from agricultural fields and other land uses.</li> <li>• <b>Groundwater:</b> Groundwater can either flow directly into the river or enter the river through seepage from the riverbanks.</li> <li>• <b>Springs:</b> Springs can be an important source of water for rivers, particularly in arid regions.</li> <li>• <b>Surface water:</b> Rivers can also receive water from other surface water systems, such as lakes, wetlands, and other rivers or streams.</li> </ul>	Give credit for a reasonable and relevant alternative answer.

			<ul style="list-style-type: none"> <li><b>Anthropogenic sources:</b> Human activities can also introduce water into river systems, such as through discharge from industrial and municipal wastewater treatment plants, or through irrigation practices that divert water from other sources into the river.</li> </ul>	
5.2.2	State whether the Thukela River is graded or ungraded.		Ungraded	
5.2.3	Explain your answer to Question 5.2.2.		There are dams located on the river system.	<p><b>Give credit for a reasonable and relevant alternative response.</b></p> <ul style="list-style-type: none"> <li><b>1 mark per concept</b> when the response is superficial and shows general knowledge and understanding.</li> <li><b>2 marks per concept</b> when the response is developed and covers the content thoroughly.</li> </ul>
5.2.4	Describe how the river's characteristics will differ from the upper course and the lower course with regards to:			
(a)	The volume of water		The volume of water in a river generally increases from the upper course to the lower course, due to the accumulation of water from tributaries and groundwater recharge. In the upper course, the river is often narrow and shallow, with a relatively small volume of water. As the river flows downstream, it becomes wider and deeper, with a larger volume of water.	<p><b>Give credit for a reasonable and relevant alternative response.</b></p> <ul style="list-style-type: none"> <li><b>1 mark per concept</b> when the response is superficial and shows general knowledge and understanding.</li> <li><b>2 marks per concept</b> when the response is developed and covers the content thoroughly.</li> </ul>
(b)	The type of features		The upper course of a river is often characterised by steep gradients, with the river flowing through narrow, V-shaped valleys. The lower course, in contrast, is typically characterised by wider, flatter valleys, with meanders and oxbow lakes.	<p><b>Give credit for a reasonable and relevant alternative response.</b></p> <ul style="list-style-type: none"> <li><b>1 mark per concept</b> when the response is superficial and shows general knowledge and understanding.</li> <li><b>2 marks per concept</b> when the response is developed and covers the content thoroughly.</li> </ul>

(c)	Type of erosion		Vertical erosion is the primary type in the upper course of a river, as the river cuts down through the landscape. This type of erosion is driven by the high gradient and fast flow of water in the upper course. In the lower course, lateral erosion becomes more important, as the river meanders across the floodplain, eroding the banks and creating new channels.	<p><b>Give credit for a reasonable and relevant alternative response.</b></p> <ul style="list-style-type: none"> <li>• <b>1 mark per concept</b> when the response is superficial and shows general knowledge and understanding.</li> <li>• <b>2 marks per concept</b> when the response is developed and covers the content thoroughly.</li> </ul>
(d)	Type and amount of load		The type of load carried by a river can vary significantly depending on the geology of the surrounding landscape. The load is often coarse and heavy in the upper course, consisting of boulders and cobbles. As the river flows downstream, the load becomes finer and lighter, consisting of sand, silt, and clay.	<p><b>Give credit for a reasonable and relevant alternative response.</b></p> <ul style="list-style-type: none"> <li>• <b>1 mark per concept</b> when the response is superficial and shows general knowledge and understanding.</li> <li>• <b>2 marks per concept</b> when the response is developed and covers the content thoroughly.</li> </ul>
(e)	The shape of the channel		The river is often narrow and deep in the upper course, with a steep gradient and a relatively straight channel. As the river flows downstream, it becomes wider and shallower, with a lower gradient and a more sinuous channel.	<p><b>Give credit for a reasonable and relevant alternative response.</b></p> <ul style="list-style-type: none"> <li>• <b>1 mark per concept</b> when the response is superficial and shows general knowledge and understanding.</li> <li>• <b>2 marks per concept</b> when the response is developed and covers the content thoroughly.</li> </ul>

5.2.5	Explain the relationship between a <i>river system</i> and its <i>watershed</i> .	<ul style="list-style-type: none"> <li>• The river system is the physical channel that carries water through a landscape, while the watershed is the entire area of land drained by that river system.</li> <li>• The watershed's boundaries are defined by the land's topography, with water flowing from high points to low points, eventually converging into streams, rivers, and other bodies of water.</li> <li>• The health and quality of a river system are directly influenced by the characteristics of its watershed.</li> <li>• The vegetation, soil, and other land uses within the watershed also affect the quantity and quality of the water that flows into the river system.</li> <li>• Conversely, the river system also affects the watershed by shaping its physical characteristics, such as soil and rock erosion and sediments deposition.</li> <li>• Rivers can also significantly affect the ecological health of a watershed, providing habitats for aquatic plants and animals and facilitating nutrient cycling.</li> <li>• The relationship between a river system and its watershed is one of interdependence, with the characteristics and health of each influencing the other.</li> <li>• Understanding this relationship is essential for managing and protecting the health of both the river system and its surrounding ecosystem.</li> </ul>	<p><b>This is a concept question</b> Candidates need to show an understanding of the concept asked. <b>Give credit for reasonable and relevant alternative assessment.</b></p> <ul style="list-style-type: none"> <li>• <b>1 mark</b> – The response is mainly descriptive with little assessment of the concept, and their knowledge is primary, and understanding may be inaccurate. <i>If just a list is given with no unpacking (MAX 2 Marks)</i></li> <li>• <b>2 marks</b> – The response offers some assessment with superficial details; their response develops on a largely secure base of knowledge and understanding. Examples may lack detail or development.</li> <li>• <b>3–4 marks</b> – The response shows a clear assessment with detailed knowledge and a solid conceptual understanding of the topic. Any examples used are appropriate and integrated effectively into the response.</li> </ul>
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5.2.6	Explore how the relationship in Question 5.2.5 leads to stream capture.	<ul style="list-style-type: none"> <li>• One of the main drivers of stream capture is changes in the topography of the watershed.</li> <li>• As a river erodes through the landscape, it can create a new path with a lower elevation than its former course.</li> <li>• If this new path is adjacent to another stream or river with a higher elevation, the water in the lower river may begin to flow into the higher river, gradually increasing its volume and velocity.</li> <li>• Over time, the higher river may capture the drainage of the lower river, diverting its flow in a new direction.</li> </ul>	<p><b>Give credit for a reasonable and relevant alternative response.</b></p> <ul style="list-style-type: none"> <li>• <b>1 mark per concept</b> when the response is superficial and shows general knowledge and understanding.</li> <li>• <b>2 marks per concept</b> when the response is developed and covers the content thoroughly.</li> </ul>
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SECTION C RURAL AND URBAN SETTLEMENT AND ECONOMIC GEOGRAPHY OF SOUTH AFRICA				
QUESTION 6 SETTLEMENT				
6.1 Rural settlement				
Study Photograph 3 of a rural settlement in the Western Cape.				
6.1.1	Select the correct term from column B to match the term in Column A. Circle the correct answer.			
(a)	Settlement classification		Isolated Farmstead	
(b)	The sector of the economy		Primary	
(c)	Level of activity		Extensive commercial	
(d)	Site of settlement		Fertile soil / Flat land	
6.1.2	Discuss TWO factors that would force people to move from this region into urban areas.		<p><b>Lack of employment opportunities:</b></p> <ul style="list-style-type: none"> <li>People may be forced to move to urban areas with more job opportunities.</li> </ul> <p><b>Limited access to basic services:</b></p> <ul style="list-style-type: none"> <li>Lacking basic services such as healthcare, education, and public utilities, people may feel that their quality of life is compromised.</li> </ul> <p><b>Natural disasters:</b></p> <ul style="list-style-type: none"> <li>People may be forced to move in regions prone to natural disasters such as floods, landslides, and earthquakes.</li> </ul> <p><b>Conflict and political instability:</b></p> <ul style="list-style-type: none"> <li>Political instability or conflict can make it unsafe for people to live there.</li> </ul> <p><b>Limited access to markets:</b></p> <ul style="list-style-type: none"> <li>If a region does not have good market access, people may be forced to move.</li> </ul>	<p><b>This is a concept question</b> Candidates need to show an understanding of the concept asked. <b>Give credit for reasonable and relevant alternative assessment.</b></p> <ul style="list-style-type: none"> <li><b>1 mark</b> – The response is mainly descriptive with little assessment of the concept, and their knowledge is primary, and understanding may be inaccurate. <i>If just a list is given with no unpacking (MAX 2 Marks)</i></li> <li><b>2 marks</b> – The response offers some assessment with superficial details; their response develops on a largely secure base of knowledge and understanding. Examples may lack detail or development.</li> <li><b>3–4 marks</b> – The response shows a clear assessment with detailed knowledge and a solid conceptual understanding of the topic. Any examples used are appropriate and integrated effectively into the response.</li> </ul>

			<b>Limited social amenities:</b> <ul style="list-style-type: none"> <li>People may move if there is a lack of social amenities such as recreational facilities.</li> </ul>	
			<b>Limited educational opportunities:</b> <ul style="list-style-type: none"> <li>The lack of good schools or universities, people may be motivated to move to urban areas to access better educational opportunities.</li> </ul>	
6.1.3	Explore TWO factors that influence:			
	(a) the location of a settlement.		<b>Water:</b> <ul style="list-style-type: none"> <li>Access to water is crucial for the survival of any settlement. Settlements tend to develop near a permanent water source such as a river, lake, or ocean.</li> <li>Where water is scarce, settlements may develop near wells or other groundwater sources.</li> </ul> <b>Topography:</b> <ul style="list-style-type: none"> <li>The physical features of the land can also influence settlement location.</li> <li>Flat, fertile land is ideal for agriculture, while hills and mountains may provide protection from enemies or harsh weather conditions.</li> </ul> <b>Natural Resources:</b> <ul style="list-style-type: none"> <li>Settlements often develop near areas with abundant natural resources such as forests, minerals, or fertile soil for agriculture.</li> <li>This can provide food, building materials, and other necessary supplies.</li> </ul> <b>Transportation:</b> <ul style="list-style-type: none"> <li>Settlements often develop along transportation routes such as rivers, ports, or major roads.</li> </ul>	<b>Give credit for reasonable and relevant alternative assessment.</b> <ul style="list-style-type: none"> <li><b>1 mark</b> – The response is mainly descriptive with little assessment of the concept, and their knowledge is primary, and understanding may be inaccurate. <i>If just a list is given with no unpacking (MAX 2 Marks)</i></li> <li><b>2 marks</b> – The response offers some assessment with superficial details; their Response develops on a largely secure base of knowledge and understanding. Examples may lack detail or development.</li> <li><b>3–4 marks</b> – The response shows a clear assessment with detailed knowledge and a solid conceptual understanding of the topic. Any examples used are appropriate and integrated effectively into the response.</li> </ul>

		<ul style="list-style-type: none"> <li>This can facilitate trade and the movement of goods and people.</li> </ul> <p><b>Climate:</b></p> <ul style="list-style-type: none"> <li>Plays a role in settlement location.</li> <li>Areas with mild climates and plentiful rainfall are more conducive to settlement than harsh desert or arctic environments.</li> </ul> <p><b>Defence:</b></p> <ul style="list-style-type: none"> <li>Settlements may be located in defensible positions such as on hilltops, cliffs, or behind natural barriers such as rivers or forests.</li> </ul> <p><b>Economic Opportunities:</b></p> <ul style="list-style-type: none"> <li>Settlements may develop in areas with economic opportunities such as mining, manufacturing, or trade.</li> <li>Opportunities to get jobs and a source of income for the inhabitants.</li> </ul> <p><b>Cultural Factors:</b></p> <ul style="list-style-type: none"> <li>Settlements may be influenced by cultural factors such as religious or social beliefs.</li> </ul>	
	(b) the size of the settlement.	<p><b>Resources:</b></p> <ul style="list-style-type: none"> <li>The availability of resources, such as food, water, and building materials, can impact the size of a settlement.</li> <li>Settlements with access to abundant resources can grow larger, while those with limited resources may remain small.</li> </ul> <p><b>Technology:</b></p> <ul style="list-style-type: none"> <li>Technological advances can also impact the size of a settlement.</li> </ul> <p><b>Economic factors:</b></p> <ul style="list-style-type: none"> <li>Economic factors such as trade, industry, and employment</li> </ul>	<p><b>Give credit for reasonable and relevant alternative assessment.</b></p> <ul style="list-style-type: none"> <li><b>1 mark</b> – The response is mainly descriptive with little assessment of the concept, and their knowledge is primary, and understanding may be inaccurate. <i>If just a list is given with no unpacking (MAX 2 Marks)</i></li> <li><b>2 marks</b> – The response offers some assessment with superficial details; their Response develops on a</li> </ul>

			<p>opportunities can drive the growth of a settlement.</p> <ul style="list-style-type: none"> <li>Settlements located in areas with solid economies may attract people and grow larger.</li> </ul> <p><b>Political factors:</b></p> <ul style="list-style-type: none"> <li>The political organisation of a settlement can also influence its size.</li> <li>Settlements that are part of larger political entities, such as cities within a nation-state, may grow more prominent due to their connection to a more extensive system.</li> </ul> <p><b>Social factors:</b></p> <ul style="list-style-type: none"> <li>Social factors such as religion, culture, and language can also impact the size of a settlement.</li> <li>Settlements with common social characteristics may grow more extensive due to the sense of community and shared identity.</li> </ul> <p><b>Infrastructure:</b></p> <ul style="list-style-type: none"> <li>The availability of infrastructure, such as roads, bridges, and public transportation, can also impact the size of a settlement.</li> <li>Access to infrastructure can support larger settlements by facilitating communication, commerce, and transportation.</li> </ul> <p><b>Environmental factors:</b></p> <ul style="list-style-type: none"> <li>Environmental factors, such as climate and natural disasters, can also impact the size of a settlement.</li> <li>Settlements vulnerable to natural disasters, such as floods or earthquakes, may remain small due to the risks involved.</li> </ul>	<p>largely secure base of knowledge and understanding. Examples may lack detail or development.</p> <ul style="list-style-type: none"> <li><b>3–4 marks</b> – The response shows a clear assessment with detailed knowledge and a solid conceptual understanding of the topic. Any examples used are appropriate and integrated effectively into the response.</li> </ul>
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## 6.2 Urban structure and patterns

Study Figures 12 to 14 and use the information to complete the table.

6.2.1 Use the information from Figures 12, 13 and 14 to complete the table below.

6.2.1	Advantages		<ul style="list-style-type: none"> <li>• A planned irregular street pattern can create a unique sense of character.</li> <li>• These areas often have a distinctive sense of place, and can be more memorable and engaging for residents and visitors.</li> <li>• Can help manage traffic flow, by creating streets that curve and meander.</li> <li>• Naturally slow down traffic and reduce the incidence of accidents.</li> <li>• The use of roundabouts or traffic circles can also improve traffic flow and safety.</li> <li>• A planned irregular street pattern can enhance walkability by creating a more interesting and engaging environment.</li> <li>• The meandering streets and diverse building facades can create a more pleasant walking experience.</li> <li>• By introducing more variety and flexibility, a planned irregular street pattern can allow for a more creative and diverse approach to urban design.</li> <li>• A planned irregular street pattern can also contribute to improved sustainability.</li> <li>• By introducing more open spaces, green infrastructure, and permeable surfaces, the area can be made more sustainable and better able to cope with environmental challenges.</li> </ul>	
6.2.1	Most likely located in city		Suburbs	
6.2.1	Street pattern		Gridiron	

6.2.1	Disadvantages	<ul style="list-style-type: none"> <li>• Monotony: The uniformity of gridiron street patterns can lead to a lack of visual interest and monotony.</li> <li>• The regularity of the layout can make it difficult for cities to create distinct neighbourhoods.</li> <li>• Gridiron street patterns can also be prone to traffic congestion.</li> <li>• Few options for alternative routes, leading to more traffic on the same streets.</li> <li>• Gridiron street patterns may also discourage walking and cycling as the alternative.</li> <li>• Blocks can make distances seem farther than they actually are.</li> <li>• It can also be difficult for pedestrians to cross multiple lanes of traffic at once.</li> <li>• The uniform gridiron layout can make adapting to changing urban needs challenging.</li> <li>• If a city wants to expand or add a new feature, such as a park or public space, it may be difficult to fit it into the existing street pattern.</li> <li>• In areas with gridiron street patterns, natural drainage systems may be lacking.</li> </ul>	
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6.2.1	Advantages		<ul style="list-style-type: none"> <li>• More interesting and aesthetically pleasing than a uniform grid layout.</li> <li>• They can create a unique character and charm.</li> <li>• It can often be more efficient in terms of traffic flow.</li> <li>• It can create shorter, more direct routes between destinations.</li> <li>• Reduces traffic congestion and improve safety, as drivers tend to be more cautious.</li> <li>• Streets easier to navigate on foot or by bike.</li> </ul>	
6.2.1	Disadvantages		<ul style="list-style-type: none"> <li>• Difficult to navigate and can make it more challenging for emergency services.</li> <li>• Leads to delays in response times and potentially have serious consequences.</li> <li>• They can also be more challenging for city planners and developers.</li> <li>• Difficult to accommodate for irregular lot sizes and building shapes.</li> <li>• Inefficiencies in terms of infrastructure, such as utilities and services.</li> <li>• Need to be routed around obstacles.</li> </ul>	
6.2.2	Assess which areas (Figures 12, 13 or 14) would have the highest land value.		<p>Figure 13</p> <p>CDB</p> <p>Bent Rent Curve</p>	<p><b>One Mark (1) for the area. Give credit for a reasonable and relevant alternative response.</b></p> <ul style="list-style-type: none"> <li>• <b>1 mark</b> if the response is superficial and shows general knowledge and understanding.</li> <li>• <b>2 marks</b> for a developed response that covers the content thoroughly.</li> </ul>



<b>QUESTION 7 ECONOMY OF SOUTH AFRICA</b>				
<b>7.1 Economic Terminology</b>				
Match the words in the block below with the statements provided. Write only the appropriate word(s) in the space provided.				
7.1.1	The study of the relationship between economic activity and geographical location.		<b>Spatial Economics</b>	
7.1.2	The concentration of industries and businesses in a particular geographic location.		<b>Agglomeration</b>	
7.1.3	A geographic region designated for economic development, with improved transportation infrastructure, investment incentives, and other supportive policies.		<b>IDZ or Economic Corridor</b>	
7.1.4	An economy dominated by service industries, such as finance, healthcare, and education.		<b>Service Economy</b>	
7.1.5	Located in areas with a high potential for industrial development near ports, airports, and major transportation routes.		<b>Economic Corridor or IDZ</b>	
<b>7.2 Agriculture</b>				
Study the table, Figure 15, below which shows maize production in Southern Africa since 2020.				
7.2.1	Determine the tonnes per hectare (Ha) in 2021 for:			
(a)	Commercial maize		5,89	
(b)	Non-commercial maize		1,76	
7.2.2	Calculate the difference in production between 2021 and 2022 for:			
(a)	Commercial maize		847 065 less	
(b)	Non-commercial maize		30 560 more	
7.2.3	Analyse the difference between the productivity of commercially grown and non-commercially grown maize.		Commercial is more productive due to: <ul style="list-style-type: none"> <li>• Better technology</li> <li>• More labour</li> <li>• Better resources</li> <li>• More land</li> <li>• Better Skills</li> </ul>	<b>Give credit for a reasonable and relevant alternative response.</b> <ul style="list-style-type: none"> <li>• <b>1 mark</b> if the response is superficial and shows general knowledge and understanding.</li> <li>• <b>2 marks</b> for a developed response that covers the content thoroughly.</li> </ul>

7.2.4	Discuss the importance of maize for food security in South Africa.	<p><b>Staple food:</b></p> <ul style="list-style-type: none"> <li>• A staple food in South Africa and is a major component of many traditional diets.</li> <li>• A major source of carbohydrates.</li> </ul> <p><b>Availability:</b></p> <ul style="list-style-type: none"> <li>• Relatively easy crop to grow, and can be cultivated in a wide range of agroecological zones.</li> <li>• It is widely available and accessible to many small-scale farmers in South Africa.</li> </ul> <p><b>Employment:</b></p> <ul style="list-style-type: none"> <li>• Important source of employment in South Africa, particularly in rural areas.</li> <li>• Provides work opportunities for many small-scale farmers.</li> <li>• People employed in the processing, packaging, and distribution of maize.</li> </ul> <p><b>Export:</b></p> <ul style="list-style-type: none"> <li>• South Africa is a major exporter of maize, particularly to other countries in Southern Africa.</li> </ul> <p><b>Foreign income:</b></p> <ul style="list-style-type: none"> <li>• Income for the country and ensures that maize is available to people in other countries.</li> </ul> <p><b>Drought resilience:</b></p> <ul style="list-style-type: none"> <li>• Relatively drought-tolerant crop, and can survive in dry conditions where other crops may fail.</li> <li>• An important crop in areas of South Africa prone to drought, particularly in the western and northern parts of the country.</li> </ul>	<p><b>This is a concept question</b> Candidates need to show an understanding of the concept asked. <b>Give credit for reasonable and relevant alternative assessment.</b></p> <ul style="list-style-type: none"> <li>• <b>1 mark</b> – The response is mainly descriptive with little assessment of the concept, and their knowledge is primary, and understanding may be inaccurate. <i>If just a list is given with no unpacking (MAX 2 Marks)</i></li> <li>• <b>2 marks</b> – The response offers some assessment with superficial details; their response develops on a largely secure base of knowledge and understanding. Examples may lack detail or development.</li> <li>• <b>3–4 marks</b> – The response shows a clear assessment with detailed knowledge and a solid conceptual understanding of the topic. Any examples used are appropriate and integrated effectively into the response.</li> </ul>
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### 7.3 Secondary Sector

Study Figure 16, which shows the percentage contribution to the South African GDP per province.

7.3.1	Discuss ONE limitation to economic development in Gauteng.	<p><b>Inequality:</b></p> <ul style="list-style-type: none"> <li>Gauteng has some of the highest levels of inequality in South Africa.</li> <li>Significant disparities in income and access to services.</li> <li>Reduced consumer demand and limiting the pool of potential entrepreneurs and investors.</li> </ul> <p><b>Infrastructure:</b></p> <ul style="list-style-type: none"> <li>Relatively well-developed infrastructure still has significant gaps in transport, energy, and water infrastructure.</li> <li>This can limit economic development by making it difficult for businesses to operate efficiently and effectively and by restricting access to markets and customers.</li> </ul> <p><b>Crime and safety:</b></p> <ul style="list-style-type: none"> <li>Gauteng has relatively high crime levels, which can limit economic development by discouraging investment and deterring tourism.</li> <li>High crime levels can also increase business costs by requiring businesses to invest in expensive security measures.</li> </ul> <p><b>Skills shortage:</b></p> <ul style="list-style-type: none"> <li>A relatively well-educated population, there is still a shortage of skilled workers in some key sectors, such as technology and engineering.</li> </ul>	<p><b>Give credit for a reasonable and relevant alternative discussion.</b></p> <ul style="list-style-type: none"> <li><b>1 mark per concept</b> when the response is superficial and shows general knowledge and understanding.</li> <li><b>2 marks per concept</b> when the response is developed and covers the content thoroughly.</li> </ul>
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			<ul style="list-style-type: none"> <li>This can limit economic development by making it difficult for businesses to find the talent to grow and innovate.</li> </ul> <p><b>Environmental challenges:</b></p> <ul style="list-style-type: none"> <li>Gauteng is a region that faces significant environmental challenges, including air and water pollution, deforestation, and soil erosion. These challenges can limit economic development by making it difficult for businesses to operate sustainably and by deterring investors concerned about the region's long-term viability.</li> </ul>	
7.3.2	Discuss factors favouring industrial development in Gauteng.		<p><b>Location:</b></p> <ul style="list-style-type: none"> <li>Gauteng is centrally located in South Africa, with access to major transport routes and ports.</li> <li>This makes it a strategic location for manufacturing and distribution, as it provides easy access to markets across the country and beyond.</li> </ul> <p><b>Infrastructure:</b></p> <ul style="list-style-type: none"> <li>Gauteng has a relatively well-developed infrastructure, with a network of highways, railways, and airports that connect the region to other parts of South Africa and the rest of the world.</li> <li>This infrastructure makes it easier for businesses to transport goods and raw materials, and provides access to a wide range of services and resources.</li> </ul> <p><b>Skilled workforce:</b></p> <ul style="list-style-type: none"> <li>Gauteng has a relatively well-educated population, with a large pool of skilled workers in key sectors such as engineering, technology, and finance.</li> </ul>	<p><b>This is a concept question</b> Candidates need to show an understanding of the concept asked. <b>Give credit for reasonable and relevant alternative assessment.</b></p> <ul style="list-style-type: none"> <li><b>1 mark</b> – The response is mainly descriptive with little assessment of the concept, and their knowledge is primary, and understanding may be inaccurate. <i>If just a list is given with no unpacking (MAX 2 Marks)</i></li> <li><b>2 marks</b> – The response offers some assessment with superficial details; their response develops on a largely secure base of knowledge and understanding. Examples may lack detail or development.</li> <li><b>3–4 marks</b> – The response shows a clear assessment with detailed knowledge and a solid conceptual understanding of the topic. Any examples used are appropriate and integrated effectively into the response.</li> </ul>

			<ul style="list-style-type: none"> <li>• This makes it easier for businesses to find the talent to grow and innovate.</li> </ul> <p><b>Access to capital:</b></p> <ul style="list-style-type: none"> <li>• Gauteng has a well-developed financial sector, with access to various financing options for businesses of all sizes.</li> <li>• This includes venture capital, private equity, and traditional bank financing, which can help businesses to access the capital they need to invest in equipment, infrastructure, and research and development.</li> </ul> <p><b>Market size:</b></p> <ul style="list-style-type: none"> <li>• Gauteng is home to the largest consumer market in South Africa, with over 15 million people.</li> <li>• This provides a large and diverse customer base for businesses to target, which can help to drive growth and profitability.</li> </ul> <p><b>Supportive policies:</b></p> <ul style="list-style-type: none"> <li>• The South African government has implemented various policies and incentives to support industrial development in Gauteng, including tax breaks, subsidies, and training programs.</li> <li>• These policies can help reduce business costs and support companies looking to expand or invest in the region.</li> </ul>	
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7.3.3	Analyse the role government can play in promoting economic development in Gauteng.	<p><b>Investment in infrastructure:</b></p> <ul style="list-style-type: none"> <li>• The government can invest in transportation, energy, and water infrastructure to improve connectivity and provide a supportive environment for businesses.</li> <li>• This includes funding for new roads, railways, and airports and upgrading existing infrastructure to accommodate growing demand.</li> </ul> <p><b>Business-friendly policies:</b></p> <ul style="list-style-type: none"> <li>• The government can implement policies encouraging entrepreneurship, innovation, and regional investment.</li> <li>• This can include tax incentives, reducing red tape, and creating a favourable regulatory environment promoting business growth and investment.</li> </ul> <p><b>Skills development:</b></p> <ul style="list-style-type: none"> <li>• The government can invest in education and skills development programs to build a workforce that is equipped to meet the demands of the modern economy.</li> <li>• This can include funding for vocational training, apprenticeships, and higher education programs that equip people with the skills they need to succeed in a rapidly changing economy.</li> </ul> <p><b>Access to financing:</b></p> <ul style="list-style-type: none"> <li>• The government can create financing programs and provide financial incentives that help businesses to access the capital they need to invest in their operations and expand their businesses.</li> </ul>	<p><b>This is a concept question</b> Candidates need to show an understanding of the concept asked. <b>Give credit for reasonable and relevant alternative assessment.</b></p> <ul style="list-style-type: none"> <li>• <b>1 mark</b> – The response is mainly descriptive with little assessment of the concept, and their knowledge is primary, and understanding may be inaccurate. <i>If just a list is given with no unpacking (MAX 2 Marks)</i></li> <li>• <b>2 marks</b> – The response offers some assessment with superficial details; their response develops on a largely secure base of knowledge and understanding. Examples may lack detail or development.</li> <li>• <b>3–4 marks</b> – The response shows a clear assessment with detailed knowledge and a solid conceptual understanding of the topic. Any examples used are appropriate and integrated effectively into the response.</li> </ul>
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			<ul style="list-style-type: none"> <li>• This can include low-interest loans, subsidies, and tax credits that help businesses to overcome financial hurdles and get off the ground.</li> </ul> <p><b>Environmental sustainability:</b></p> <ul style="list-style-type: none"> <li>• The government can promote sustainability in the region by investing in green infrastructure and supporting businesses that adopt sustainable practices.</li> <li>• This can include incentives for renewable energy adoption, sustainable waste management, and sustainable land use practices.</li> </ul> <p><b>Tourism promotion:</b></p> <ul style="list-style-type: none"> <li>• The government can promote tourism in the region by investing in infrastructure, marketing, and other initiatives that help attract visitors.</li> <li>• This can help create new jobs and stimulate economic growth while showcasing the region's unique cultural and natural attractions.</li> </ul>	
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**Total: 200 marks**