



NATIONAL SENIOR CERTIFICATE EXAMINATION
MAY 2024

GEOGRAPHY: PAPER II

MARKING GUIDELINES

Time: 1½ hours

100 marks

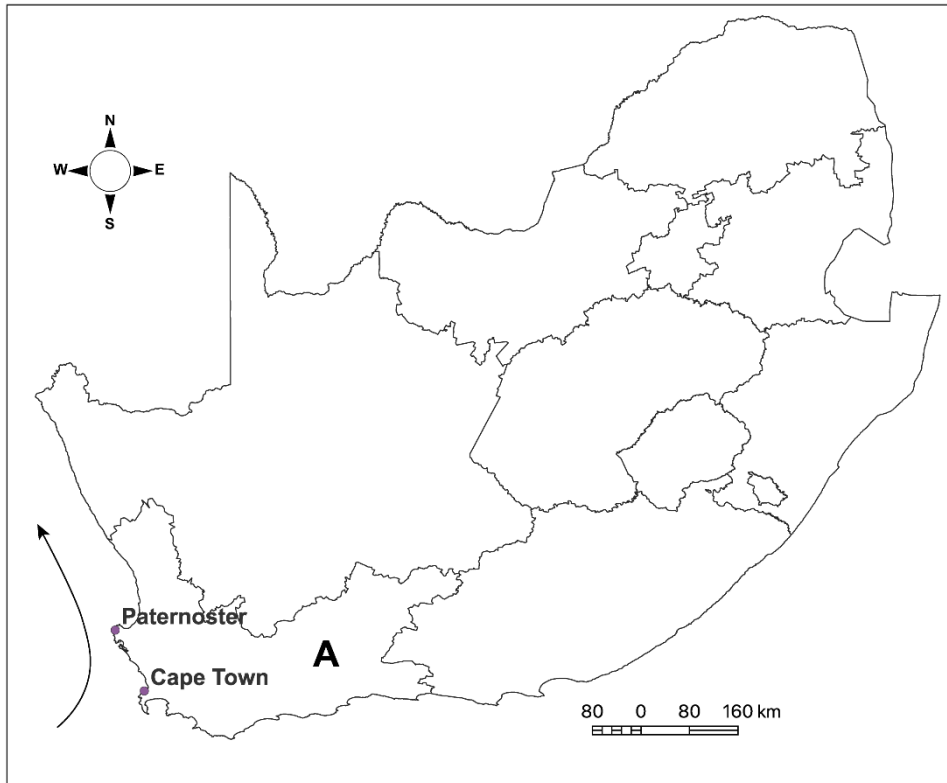
These marking guidelines are prepared for use by examiners and sub-examiners, all of whom are required to attend a standardisation meeting to ensure that the guidelines are consistently interpreted and applied in the marking of candidates' scripts.

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

Please note: All calculations involving a scale will be checked after printing.

QUESTION 1 MAP SKILLS AND FLUVIAL GEOMORPHOLOGY

Figure 1 – Location map and fact file



[Source: IEB cartographer]

- Paternoster, founded in 1863, is one of the oldest fishing villages on the West Coast of South Africa.
- Its name means 'Our Father' in Latin, which either refers to the prayers of the Portuguese sailors when they became shipwrecked, or to the name given to the beads that the Khoi (Khoekhoe) tribe wore.
- The remarkable coastline of jagged cliffs and white boulders makes this one of the most beautiful beaches and a sought-after tourist destination.
- The area is a pillar in the South African commercial fishing industry. The town itself has a lobster factory and fish farms, whilst the local people catch and sell herring, and harvest mussels from the rocks.
- Limestone is abundant in the area and it was often used for building. Whitewashed houses and fisherman's cottages dominate the town's architecture. Nowadays the town is better known as a tourist centre than a fishing hub.

[Source: Adapted from <<https://www.paternoster.co.za/paternoster/history>>]

1.1 Refer to the location map on page 3 and **mark** the correct answer.

1.1.1 The capital of the province is the ... national capital.

judicial	
legislative	X
executive	
administrative	

1.1.2 The ocean current that flows past Paternoster is: (circle 3 correct answers)

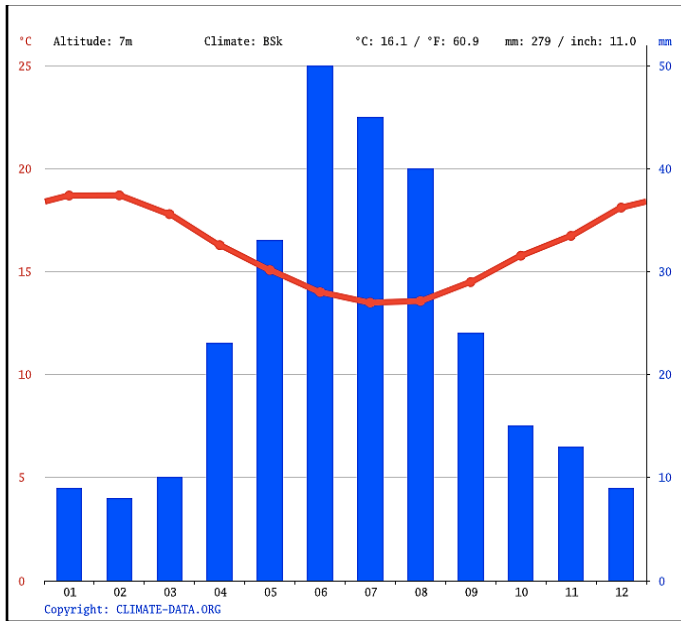
warm north flowing Agulhas cold south flowing Benquela

1.1.3 Calculate the straight-line distance from Paternoster to Cape Town.

Distance: 140 km (Accept 130 km–150 km)

1.2 Refer to the graph to answer the questions below.

Figure 2 – Climate graph for Paternoster



[Source: <Climate-Data.org>]

1.2.1 The climate experienced at Paternoster is best described as ...

Mediterranean.	X
desert.	
subtropical.	

1.2.2 Circle the correct answers:

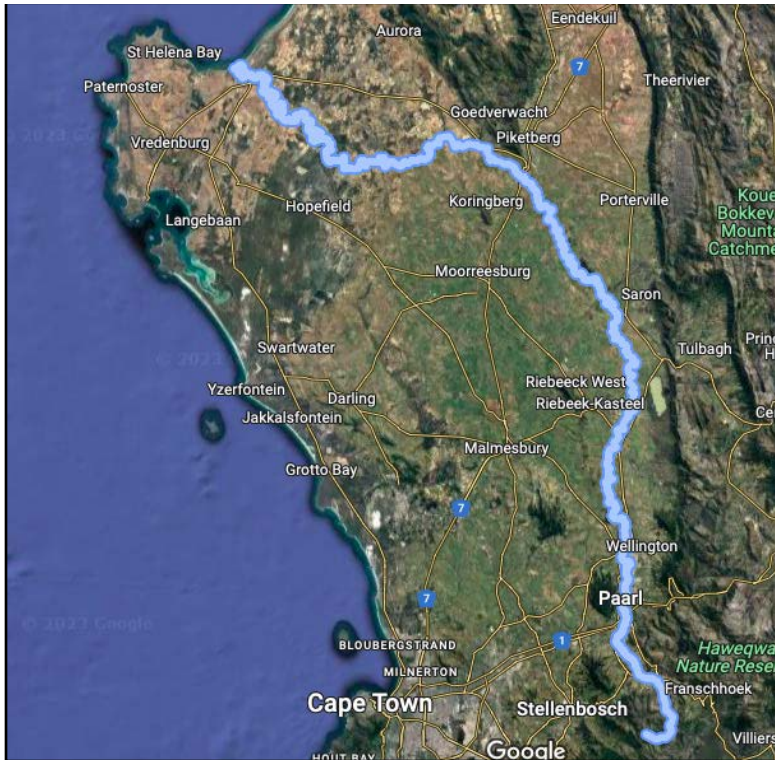
Rainfall in Paternoster is *high* / *low* and annual temperatures are generally *high* / *low*.

1.3 Berg River and the Canoe Marathon

The Berg River rises in the Franschhoek Mountains at an altitude of 1 500 m. The river is 294 km long.

[Source: <sahistory.org.za>]

Figure 3 – Berg River



[Source: Google maps]

1.3.1 The source of the Berg River is (i) or (ii) and the mouth lies to the (iii) or (iv) of Paternoster.

(i) St Helena Bay (ii) Franschhoek (iii) SW (iv) ENE

The correct order is:

(i)	(iii)	
(i)	(iv)	
(ii)	(iii)	
(ii)	(iv)	X

1.3.2 Use the information given to calculate the average gradient of the Berg River. Mark the correct answer

1:5	
1:0.05	
1:196	x

Calculations:
1 500 : 294 000

Figure 4 – Berg River Canoe Marathon



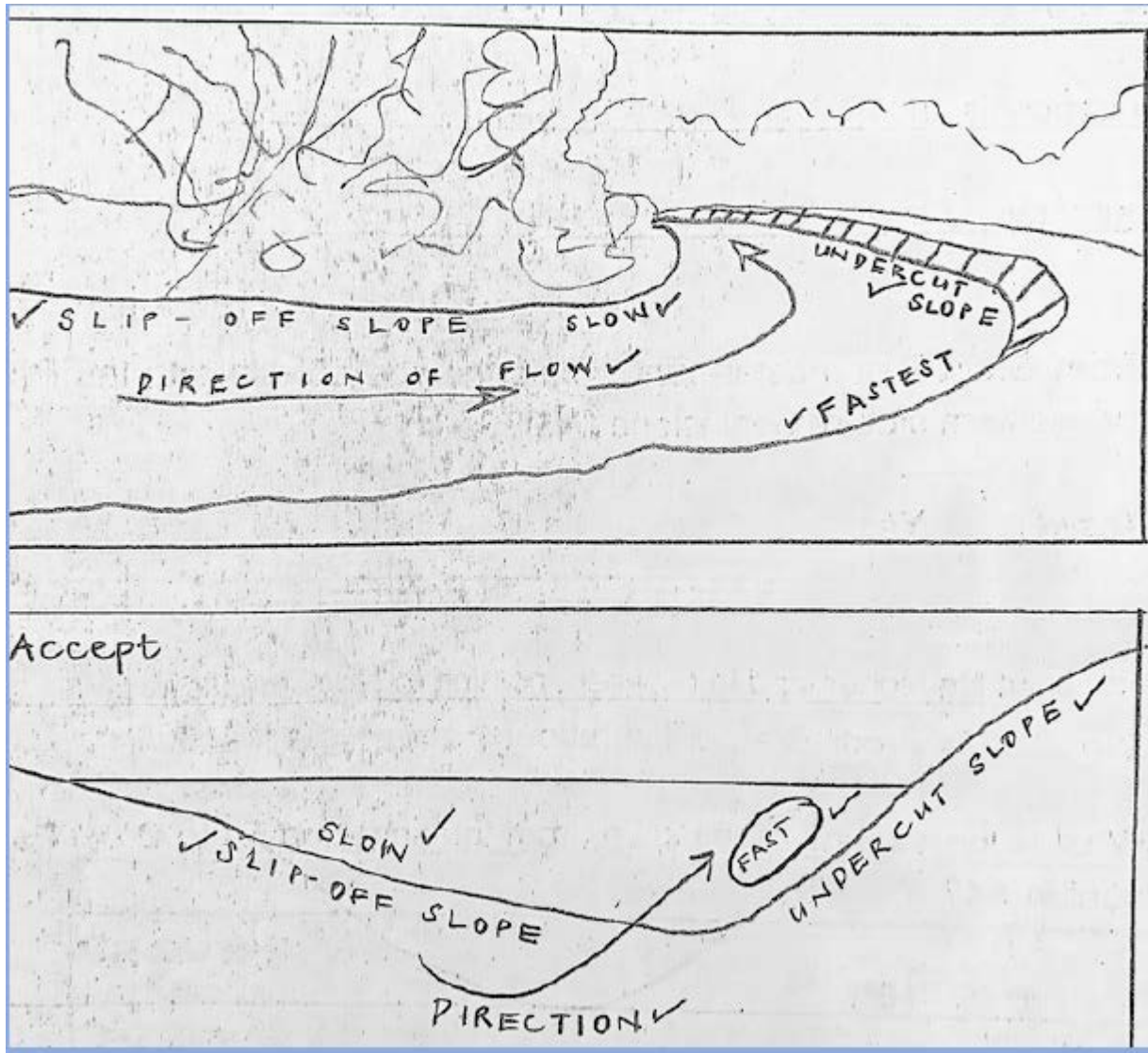
[Source: <ShowMe South Africa>]

1.3.3 In the space below, draw a field sketch of the photograph above. On it, label the following:

- Direction of flow
- Undercut and slip-off slopes
- Area of fastest flow
- Area of slowest flow

Marks awarded for each point above:

- correct direction (direction of canoes)
- slip-off slope on left
- undercut slope on right
- fastest flow accept middle to right (undercut) slope
- slowest flow on left (slip-off)



1.3.4 Using the photograph on page 7, fill in the table below:

	Answer:	Proof:
Course of the river (upper/ middle/ lower)	Middle	Meander, lateral erosion evident, high volume, moderate gradient
Type of flow (laminar/ turbulent)	Laminar	Smooth flow

Q1 subtotal

QUESTION 2 MAP SKILLS AND SETTLEMENT

2.1 A group of tourists meet at the school in Paternoster (E4 on the topographic map). They walk along the hiking trail to Groot Paternoster-punt (point) in A4.

2.1.1 Calculate the distance they will walk in kilometres.

8,4km	x
16,8km	
84km	

Calculation:
 $16,8 \times 0,5$

2.1.2 Identify THREE natural features they would be able to see on this hike.

- Beaches/ sea Protected area
- Rocky outcrops/ islands
- River mouth/ rivers/ bays

2.1.3 From Groot Paternoster-punt, would they be able to see the lighthouse on the western side of Seal Island (A3)?

Answer: Yes

Reason: No higher land in between, nothing to block the view.

2.1.4 What is the bearing of this hike, from the school in E4 to Groot Paternoster-punt in A4?

8° (6°–10°)

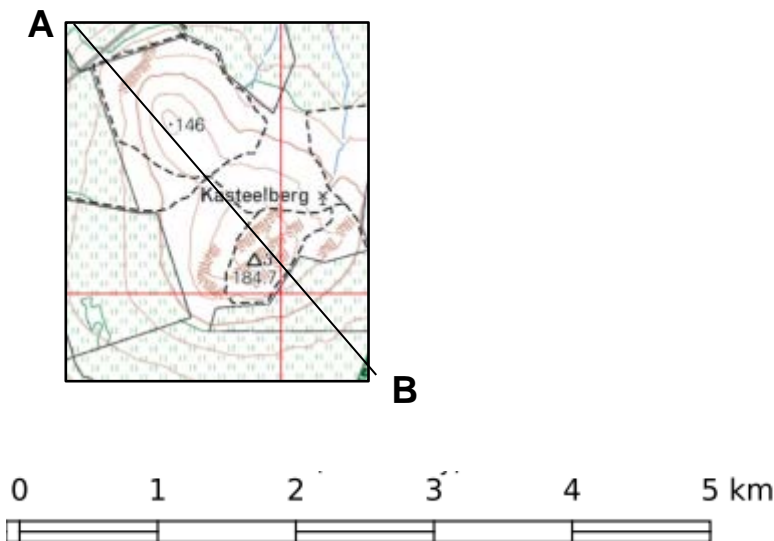
2.2 Read the following extract about Kasteelberg (E7).

The Place of Kasteelberg in Khoekhoe History

- Kasteelberg was a convenient camping location for early herders to access the rich marine resources of the West Coast. Young seals and shellfish were a major part of their diet, and seal fat was mixed with red pigment (ochre) and used as a body covering.
- The koppie was occupied by Middle Stone Age hunters some 30 000 years ago, but the main occupation came much later, approximately 1 800 years ago.
- Kasteelberg is by far the richest herding site in the Western Cape. There is a small cave that shows two occupation periods. During the first occupation period, it was used by hunters because the main fauna found here was small buck. During the second occupation period, the cave was used by shepherds.

[Source: <<https://www.theheritageportal.co.za/article/place-kasteelberg-khoekhoe-history>>]

Figure 5 – Kasteelberg



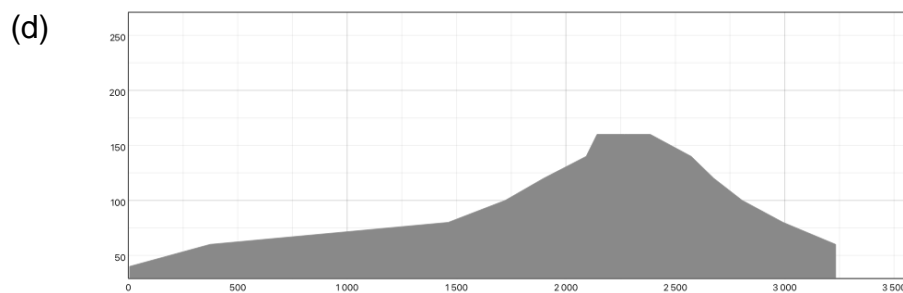
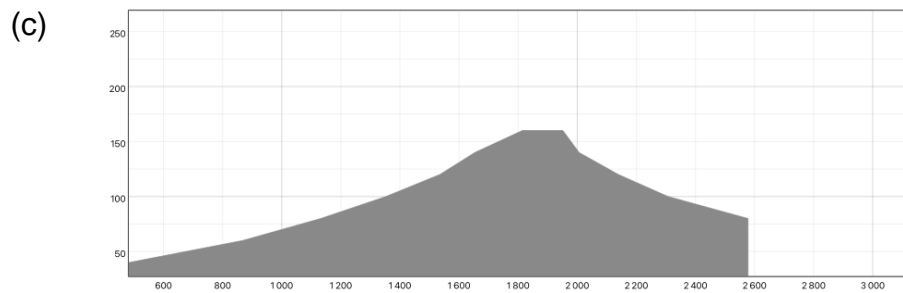
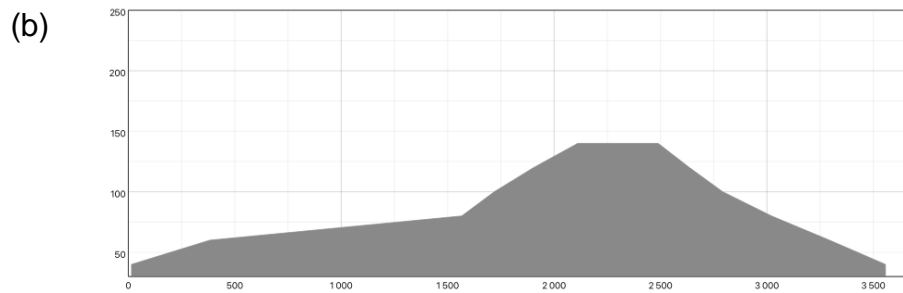
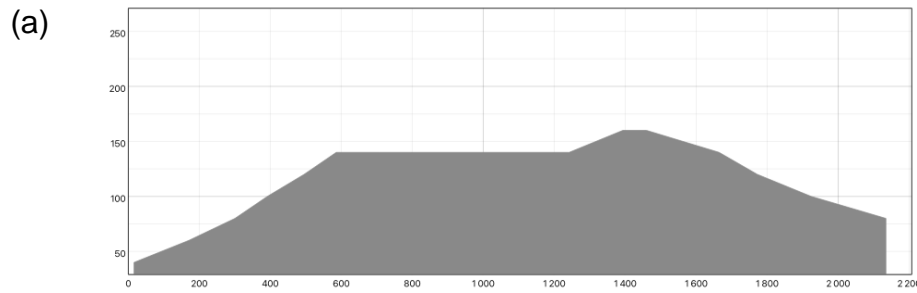
2.2.1 Calculate the area represented in Figure 5 above in hectares.

Area: 550 ha (if measured on Topo 285 ha) hectares

Calculations:
 L= 2,5m x B=2,2km
 A= 5,5km squared

- 1 method
- 1 conversion to hectares
- 1 answer

2.2.2 Use the topographic map of Kasteelberg (E7). Which of the cross sections below best suits the line A–B in Figure 5 on page 9? Mark the correct answer.



- A
- B
- C
- D

2.2.3 Calculate the vertical exaggeration of the cross section in (a) on page 11.

Vertical scale: 1 cm rep 50 m

Horizontal scale: 1 cm rep 200 m

Vertical exaggeration: 4 times

Calculations:

VH 1 cm rep 50 m

HS 1 cm rep 200 m

1 method

2.2.4 Using evidence from the map and the extract, explain why Kasteelberg was a favoured site for Khoekhoe settlement.

Access to marine resources for protein/ ochre

Caves for residence, rich herding site

Lookout site as it is higher in elevation to spot game and for safety

2.2.5 Suggest a reason why it is important to preserve and celebrate heritage sites such as this one.

Past is important to remember; generations who lived before us shape our world today. Adds character, defines an area and makes it special, provides a sense of identity. Everyone has a story, we need to remember what went before.

2.3 Paternoster Hotel was founded in 1940 when one of the original farmhouses was converted.

Figure 6 – Paternoster Hotel circa 1940



[Source: <<https://paternosterhotel.co.za/author/paternosterhotel/>>]

Figure 7 – Paternoster Hotel today



[Source: <<https://www.eatout.co.za/venue/paternoster-hotel/>>]

2.3.1 Figures 6 and 7 show temporal resolution, taken 80 years apart. State whether this is high or low temporal resolution, with a reason for your answer.

Low – not taken within a short time frame but many years apart.

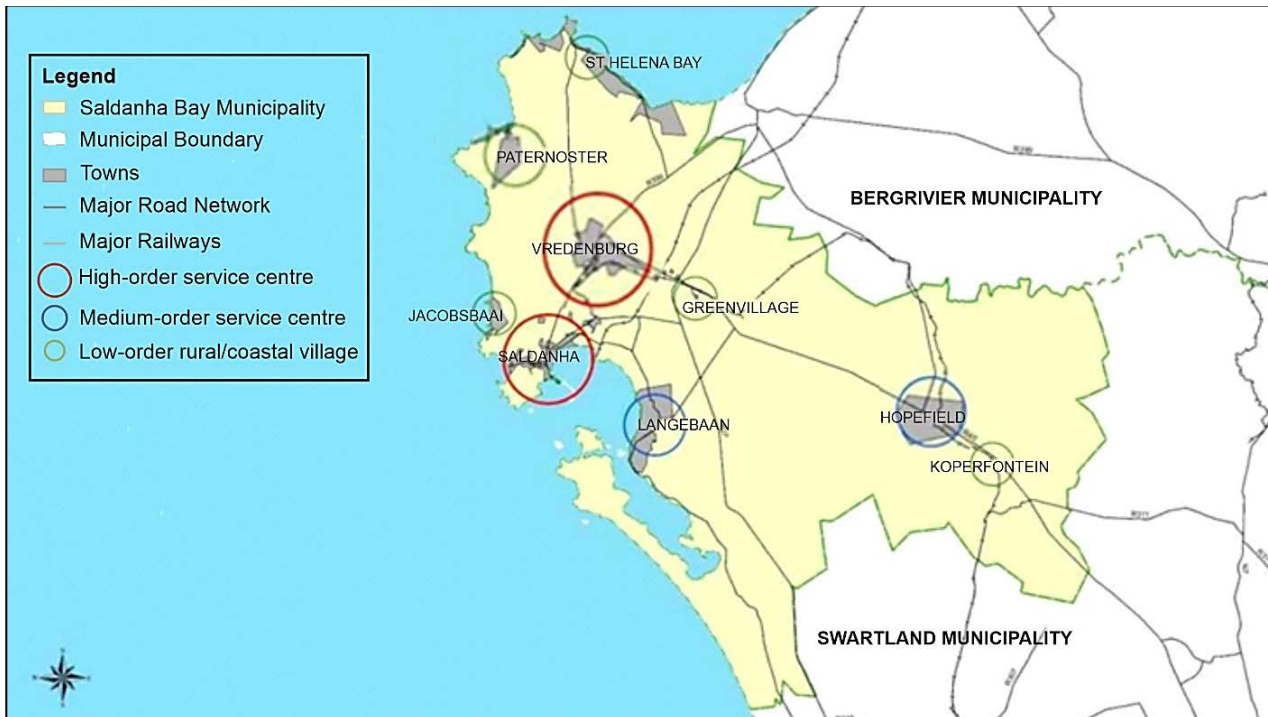
- 2.3.2 The hotel is one of the many buildings in Paternoster that displays *facadism*. Explain what this means.

The building has maintained its traditional exterior but has been modernised inside.

Q2 subtotal

QUESTION 3 ECONOMIC GEOGRAPHY

Figure 8 – Saldanha Bay Municipality



[Source: Human Settlements Plan: Saldanha Bay Municipality]

Figure 9 – Table of main functions, economic base and locational advantages

Settlement	Main functions	Economic hierarchy	Economic base: locational advantages
Saldanha	High-order main center	1	Industrial town
			Deep sea harbour
			Proclaimed IDZ
			Established fishing industry and harbour
			Railway connection
Hopefield	Medium-order agricultural service center	4	Limited commercial activities
			Railway connection
Paternoster	(a)	4	(b)
			(c)

[Source: Human Settlements Plan: Saldanha Bay Municipality]

- 3.1 3.1.1 The table states that Saldanha is a 'Proclaimed IDZ'. Explain fully what an IDZ is.

Industrial Development Zones – areas identified for targeted development

to promote manufacturing and encourage beneficiation of resources.

- 3.1.2 The table has missing words at (a), (b) and (c). Fill in the missing words to complete the table.

(a) (High-order/ Medium-order/ Low-order) Low-order

(b) (Economic activity 1) Fishing industry / Salt mining / mining

(c) (Economic activity 2) Commercial farming

- 3.1.3 Provide a reason for your answer to Question 3.1.2 (a).






Limited transport network, low nodality, few economic activities available,

small population

- 3.2 Identify THREE proofs from the topographic map 3217DD PATERNOSTER that commercial farming is occurring around Paternoster.

- Extensive areas of land under cultivation, symbol for cultivated land
- Farms have names to be registered as businesses for banking purposes, e.g. Sandfontein, Besterkraal. Farms have borders denoting private land ownership.
- Along transport routes to transport goods to markets for sale (outputs) and for ease of inputs, e.g. workers, seeds to be delivered.

3.3 Using topographic map evidence, fill in the table below.

	Photograph	Sector of the economy	Alphanumeric block on map	Factor favouring this activity	Factor hindering this activity
Commercial farming		<u>Primary</u> (1)	A to H, 5 to 8	<u>Large areas of flat land available</u> (1)	<u>Lack of rain, poor soils</u> (1)
Commercial fishing		<u>Primary</u> (1)	A to H, 1 to 3	<u>Proximity to sea</u> (1)	<u>Small markets, low buying power of locals, seasonal income</u> (1)
Tourism		<u>Tertiary</u> (1)	E4	<u>Unspoilt beaches, unpopulated areas</u> (1)	<u>Paternoster is remote, few tourists</u> (1)
Salt works		<u>Primary</u> (1)	D6 (1)	<u>Availability of salt as a raw material</u> (1)	Expensive to mine, non-renewable (1)
Informal fishing		<u>Primary</u> (1)	E4	<u>Cold ocean providing resources</u> (1)	Lack of funds for equipment, laws on fish quotas/ size, permits needed (1)

QUESTION 4 CLIMATE, SETTLEMENT AND GIS

Figure 10 – The coastline of Paternoster



[Source: <<https://www.waze.com>>]

4.1 4.1.1 On the map above, in the area between Die Gaaitjie Restaurant and Eerste Mosselbank, draw arrows to show in which direction the winds will blow during the day, and another arrow to show the direction of the winds at night.

KEY

Day	
Night	

4.1.2 Briefly explain how these daytime winds form.

Land heats up faster than the ocean (specific heat of water is greater, sunlight only heats top layers, water has currents to mix heating, water is opaque allowing rays to penetrate deeper) so land has a LP and there is a HP over the sea. Winds move from the HP onshore to the LP over land. Accept day = hot, air moves upwards

4.1.3 The farmers at Noodhulp (G6 on the topographic map) notice that their farm is noticeably cooler than Paternoster (E4), both in summer and winter. Fill in the table below to explain this.

	Noodhulp cooler	Paternoster warmer
Reason 1	Rural area, sunlight used up in process of photosynthesis	UHI effect – built-up area, materials that absorb heat, e.g. tar and concrete
Reason 2	Wind moves through freely, heat not trapped	Greater pollution to trap heat, buildings block or channel winds

Figure 11 – Restaurants in Paternoster



[Source: Google Maps]

4.2 The restaurants in Paternoster are grouped together thereby displaying *functional magnetism*.

4.2.1 Explain what *functional magnetism* means.

Activities with the similar functions (restaurants) are attracted to be in the same area, or cluster together to make business easier. Attracts customers to one area and promotes healthy competition.

4.2.2 What advantages are there to being grouped together?

- For tourists All restaurants are close so it provides a variety of choice without having to travel.
- For restaurant owners People attracted to the area, easier to get walk-ins. Healthy competition can maintain standards.

4.3 On a GIS programme, real-world items are represented by nodes, ways and boundaries. If you click on any feature, the programme will display fields.

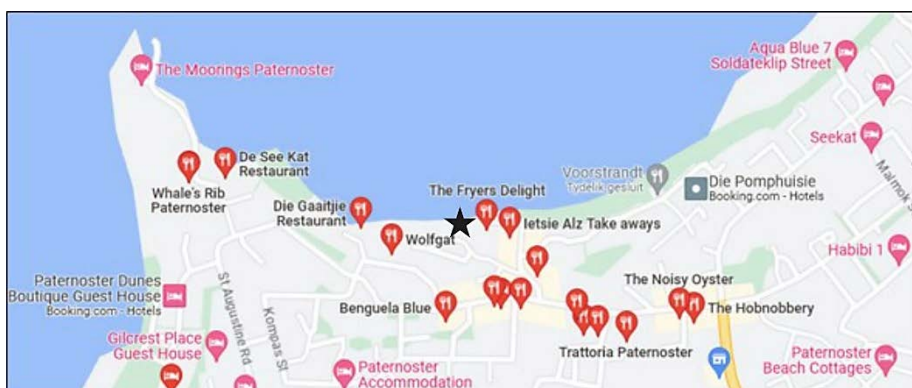
Provide synonyms for these terms by selecting from the words below.

Attributes/ Polygons/ Points/ Lines

- (a) Nodes Points
- (b) Ways Lines
- (c) Boundaries Polygons
- (d) Fields Attributes

4.4 You need to decide on the location of a new restaurant in Paternoster. On Figure 11, indicate clearly, with a star, where you would like to place your restaurant. The location must fulfil the following criteria:

- It must be north facing.
- It must have a view of the ocean.
- It must be within the main restaurant district.



Total: 100 marks