



Province of the
EASTERN CAPE
EDUCATION

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

SEPTEMBER 2020

GEOGRAPHY P1

MARKS: 225

TIME: 3 hours

This question paper consists of 15 pages.

INSTRUCTIONS AND INFORMATION

1. This question paper consists of four questions.
2. Answer any THREE questions of 75 marks each.
3. All diagrams are included in the ANNEXURE.
4. Number the questions correctly according to the numbering system used in this question paper.
5. Leave a line between subsections of questions answered.
6. Start EACH question on a NEW page.
7. Do NOT write in the margins of the ANSWER BOOK.
8. Illustrate your answers with labelled diagrams, where possible.
9. The mark allocation is as follows: (2 x 1) (2) means that TWO facts are required for ONE mark each.
(2 x 2) (4) means that TWO facts are required for TWO marks each.
10. If words/action verbs like **name, identify, provide, classify**, are used in a question, ONE word answers are acceptable.
If words/action verbs like **discuss, define, explain, comment, evaluate, justify, suggest** and **substantiate** are used in a question, FULL sentences or phrases are required.
All paragraph questions must be answered in FULL sentences.
11. Write neatly and legibly.

SECTION A: CLIMATE, WEATHER AND GEOMORPHOLOGY**QUESTION 1**

1.1 Refer to FIGURE 1.1 showing winds associated with valley climates. Match the statements below to a wind type (**A** or **B**). Write only the letter next to the question numbers (1.1.1–1.1.7) in the ANSWER BOOK.

1.1.1 Can also be described as an upslope wind

1.1.2 Associated with the formation of frost pockets

1.1.3 Carries smoke released by industries into the upper atmosphere

1.1.4 Traps pollutants causing smog

1.1.5 Blows during the day

1.1.6 This wind has a negative impact on settlements on the valley floor

1.1.7 Can also be described as a downslope wind (7 x 1) (7)

1.2 Choose a term from COLUMN B that matches the geology description in COLUMN A. Write only the letter (A–I) next to the question numbers (1.2.1–1.2.8) in the ANSWER BOOK, for example 1.2.9 J.

COLUMN A	COLUMN B
1.2.1 Area covered by a river and its tributaries	A watershed
1.2.2 Upper limit of water underground	B episodic
1.2.3 Area from where a river draws its water	C trellis
1.2.4 Rivers that only flow after heavy rainfall	D rectangular
1.2.5 Drainage pattern that develops in fold mountains	E abstraction
1.2.6 Drainage pattern that forms on igneous rocks with many joints	F drainage basin
1.2.7 Rivers that originate in areas of high rainfall	G catchment
1.2.8 Process whereby a watershed changes its position	H exotic
	I water table

(8 x 1) (8)

1.3 FIGURE 1.3 shows the impact of tropical cyclones on coastal regions.

- 1.3.1 Name the stage of development of the tropical cyclone depicted by FIGURE 1.3. (1 x 1) (1)
- 1.3.2 State the main effect of tropical cyclones on coastal regions as evident in photograph **A**. (1 x 1) (1)
- 1.3.3 Why would a tropical cyclone dissipate when it reaches land? (2 x 1) (2)
- 1.3.4 Discuss TWO weather conditions associated with this stage of the tropical cyclone (your answer to QUESTION 1.3.1). (2 x 2) (4)
- 1.3.5 Refer to sketch **B**.
- (a) What is a *storm surge*? (1 x 1) (1)
- (b) Discuss how the dangerous semi-circle (leading left quadrant) would contribute to the formation of storm surges. (1 x 2) (2)
- (c) Explain the negative impact that tropical cyclones would have on tourism in a country. (2 x 2) (4)

1.4 FIGURE 1.4 is a satellite image of line thunderstorms.

- 1.4.1 What is a *moisture front*? (1 x 1) (1)
- 1.4.2 State TWO pieces of evidence on the satellite image that would indicate that line thunderstorms instead of normal thunderstorms are occurring. (2 x 1) (2)
- 1.4.3 Discuss why more clouds are positioned to the east instead of to the west of the country. (2 x 2) (4)
- 1.4.4 In a paragraph of approximately EIGHT lines, explain how the location of the anticyclones in summer would promote the formation of line thunderstorms. (4 x 2) (8)

1.5 FIGURE 1.5 shows river rejuvenation.

- 1.5.1 What is *river rejuvenation*? (1 x 1) (1)
- 1.5.2 Give evidence indicating that river rejuvenation has taken place. (2 x 1) (2)
- 1.5.3 Discuss TWO causes of river rejuvenation. (2 x 2) (4)
- 1.5.4 Suggest TWO reasons for the abandoned terrace in the sketch. (2 x 2) (4)
- 1.5.5 Explain the negative impact that a rejuvenated landscape will have on farming activity. (2 x 2) (4)

1.6 Study FIGURE 1.6, photographs (**A** and **B**) of river discharge.

- 1.6.1 What is *river discharge*? (1 x 1) (1)
- 1.6.2 Name the types of discharge evident in photographs **A** and **B**, respectively. (2 x 1) (2)
- 1.6.3 Describe the difference in discharge that is evident in photographs **A** and **B**. (2 x 1) (2)
- 1.6.4 Why would the type of river discharge evident in photograph **A** be more beneficial to farmers? (1 x 2) (2)
- 1.6.5 In a paragraph of approximately EIGHT lines, discuss how river discharge would influence the different stages/courses of a river. (4 x 2) (8)

[75]

QUESTION 2

- 2.1 Choose a term in COLUMN B that matches the climatological description in COLUMN A. Write only the letter (A–I) next to the question number (2.1.1–2.1.8) in the ANSWER BOOK, for example 2.1.9 J.

COLUMN A		COLUMN B
2.1.1	Small, weakly developed cell that moves from the west coast to the east coast	A polar front
2.1.2	Describes descending air that heats by 1 °C every 100 m	B aspect
2.1.3	Zone where tropical westerlies and polar easterlies meet	C microclimate
2.1.4	Anticlockwise movement of air in the northern hemisphere	D hurricane
2.1.5	Associated with clear and stable weather conditions	E cyclone
2.1.6	Study of climate in a small area	F coastal low
2.1.7	Name given to a tropical cyclone in North America	G typhoon
2.1.8	The angle at which the sun's rays strike the slope	H DALR
		I anticyclone

(8 x 1) (8)

- 2.2 Refer to FIGURE 2.2. Match the statements below with upper, middle, or lower course of the river. Write only the course of the river next to the question numbers (2.2.1–2.2.7) in the ANSWER BOOK.

2.2.1 Valley is V-shaped and steep

2.2.2 Deltas and braided streams are common fluvial landforms

2.2.3 Lateral erosion dominates

2.2.4 Vertical erosion dominates

2.2.5 River and larger streams begin to meander

2.2.6 Temporary base levels of erosion like waterfalls and rapids occur here

2.2.7 This course is associated with a permanent base level of erosion

(7 x 1) (7)

2.3 Read the extract in FIGURE 2.3 referring to mid-latitude cyclones.

- 2.3.1 What is a *cold front*? (1 x 1) (1)
- 2.3.2 How do cold fronts form? (1 x 2) (2)
- 2.3.3 Quote evidence from the passage that suggests that this cold front will affect the entire country. (1 x 2) (2)
- 2.3.4 Discuss the relationship between cold fronts and very rainy conditions. (1 x 2) (2)
- 2.3.5 In a paragraph of approximately EIGHT lines, explain the economic impact that snow and heavy rainfall would have on the country. (4 x 2) (8)

2.4 FIGURE 2.4 shows the differences in climate between rural and urban areas.

- 2.4.1 Name ONE climatic element evident in the sketch that shows the difference between rural and urban areas. (1 x 1) (1)
- 2.4.2 Why can we describe the condition depicted over the city in the sketch, as a heat island and not a pollution dome? (1 x 2) (2)
- 2.4.3 Explain how urban activities increase the temperatures in the city. (2 x 2) (4)
- 2.4.4 Account for the fact that the city receives more rainfall than rural areas even though more evaporation takes place in the rural areas. (2 x 2) (4)
- 2.4.5 Discuss how the heat island can affect the health of people. (2 x 2) (4)

2.5 FIGURE 2.5 is based on TWO (**A** and **B**) fluvial landforms.

- 2.5.1 What evidence suggests that these two fluvial landforms formed in the lower course of the river? (1 x 1) (1)
- 2.5.2 Identify the TWO fluvial landforms in sketch **A** and **B**. (2 x 1) (2)
- 2.5.3 How did fluvial landform **A** develop? (2 x 2) (4)
- 2.5.4 Discuss the formation of fluvial landform **B**. (2 x 2) (4)
- 2.5.5 Explain the impact of fluvial landform **B** on farming activities. (2 x 2) (4)

2.6 Study FIGURE 2.6 that is based on drainage density.

- 2.6.1 What is *drainage density*? (1 x 1) (1)
- 2.6.2 Classify the drainage density at **A** and **B**, into either high or low. (1 x 2) (2)
- 2.6.3 Discuss how the removal of vegetation will affect the drainage density at **A**. (2 x 2) (4)
- 2.6.4 In a paragraph of approximately EIGHT lines, discuss the factors that caused the drainage density at **B**. (4 x 2) (8)
- [75]**

SECTION B: RURAL AND URBAN SETTLEMENTS AND SOUTH AFRICAN ECONOMIC GEOGRAPHY**QUESTION 3**

3.1 Choose the correct word(s) from those given in brackets. Write only the word(s) next to the question number (3.1.1–3.1.8) in the ANSWER BOOK.

3.1.1 The location of a settlement in relation to the surrounding area is known as (site/situation).

3.1.2 (Expropriation/Restitution) is a land reform policy compensating people for land they lost during apartheid.

3.1.3 Forestry is a dominant economic activity in (rural/urban) settlements.

3.1.4 (Small scale/Large scale) farming occupies large tracts of land and has high yield per hectare.

3.1.5 ('Brain drain/Bright lights') is considered an important consequence of people leaving rural areas.

3.1.6 (Site/Situation) is the exact physical landscape on which a settlement is built.

3.1.7 Crossroad settlements can be (semi-circular/star shaped).

3.1.8 (Aids/Soil erosion) is an important social justice issue in rural areas.

(8 x 1) (8)

3.2 Various options are provided as possible answers to the following questions. Choose the correct answer and write only the letter (A–D) next to the question numbers (3.2.1–3.2.7) in the ANSWER BOOK, for example 3.2.8 A.

3.2.1 The Saldanha Bay IDZ is focused on the ... sector.

- A motor vehicle
- B oil and gas
- C aluminium
- D tourism

3.2.2 ... industries are located between the source of raw material and the customer.

- A Footloose
- B Market orientated
- C Bridge
- D Raw material orientated

3.2.3 The platinum SDI industrial region is favoured mostly by access to ...

- A minerals.
- B skilled labour.
- C coalfields.
- D harbours.

3.2.4 A sugar mill is an example of a ... industry.

- A footloose
- B ubiquitous
- C raw material orientated
- D market orientated

3.2.5 The ... was a post-apartheid strategy for industrial development that wanted to create jobs and attract foreign investment.

- A National Development Plan
- B GEAR
- C RDP
- D Good Hope Plan

3.2.6 The platinum SDI is located in the ... Province.

- A Gauteng
- B North West
- C Eastern Cape
- D KwaZulu-Natal

3.2.7 Industrial development zones focus primarily on ...

- A international imports.
- B tourism.
- C international exports.
- D agriculture.

(7 x 1) (7)

3.3 FIGURE 3.3 shows a photograph depicting urban blight.

- 3.3.1 Describe how the photograph depicts urban blight. (1 x 1) (1)
- 3.3.2 Name TWO causes of urban blight. (2 x 1) (2)
- 3.3.3 Why is it difficult for local authorities to manage urban blight? (1 x 2) (2)
- 3.3.4 Discuss how facadism could be used by local authorities to alleviate the effects of urban blight. (1 x 2) (2)
- 3.3.5 In a paragraph of approximately EIGHT lines, explain the economic importance of urban renewal for urban areas. (4 x 2) (8)

3.4 Refer to FIGURE 3.4, an article on urbanisation of the world population.

- 3.4.1 What is *urbanisation*? (1 x 1) (1)
- 3.4.2 According to the article, how many people live in cities today? (1 x 1) (1)
- 3.4.3 Quote ONE dynamic (process of change) of urbanisation listed in the article. (1 x 1) (1)
- 3.4.4 Describe how the process of urban growth can increase the population of urban areas. (1 x 2) (2)
- 3.4.5 How can urbanisation be associated with the growth of informal settlements? (1 x 2) (2)
- 3.4.6 Explain why infectious diseases (like the coronavirus) would spread rapidly in South Africa's informal settlements. (2 x 2) (4)
- 3.4.7 Discuss the negative economic impact that the increasing rate of urbanisation can have on urban areas. (2 x 2) (4)

3.5 Study the infographic (FIGURE 3.5) on gold mining in South Africa.

- 3.5.1 State the trend in gold production since 1970. (1 x 1) (1)
- 3.5.2 According to the passage, what are the negative issues in gold mining? (2 x 1) (2)
- 3.5.3 Discuss ONE physical (natural) factor that could have been responsible for the trend stated in QUESTION 3.5.1. (1 x 2) (2)
- 3.5.4 How can 'digital technology' have a negative impact on gold mining? (1 x 2) (2)
- 3.5.5 Discuss possible ways in which mine labourers (workers) can hinder the production of gold in mines. (2 x 2) (4)

3.5.6 Explain some incentives (motivation) that mine owners can introduce to mine labourers (workers) to improve the production of gold in our mines. (2 x 2) (4)

3.6 FIGURE 3.6 is a case study based on the strategies for industrial development: Richards Bay.

3.6.1 In which province is Richards Bay located? (1 x 1) (1)

3.6.2 State from the extract the new investment in Richards Bay. (1 x 1) (1)

3.6.3 Name ONE advantage of this new investment for the people of Richards Bay. (1 x 1) (1)

3.6.4 Discuss what physical (natural) factors made Richards Bay an attractive location for this investment. (2 x 2) (4)

3.6.5 Despite this investment (mentioned in the case study), the local economy still experiences many challenges. In a paragraph of EIGHT lines explain these challenges experienced by the Richards Bay SDI. (4 x 2) (8)

[75]

QUESTION 4

4.1 Various options are provided as possible answers to the following questions. Choose the correct answer and write only the letter (A–D) next to the question numbers (4.1.1–4.1.7) in the ANSWER BOOK, for example 4.1.8 A.

4.1.1 An arrangement of settlements from smallest to largest, according to available functions refers to urban ...

- A sprawl.
- B expansion.
- C hierarchy.
- D growth.

4.1.2 The ... land use zone has the most accessibility and the highest building density.

- A low income residential
- B central business district
- C rural-urban fringe
- D high income residential

4.1.3 A/An ... street plan (pattern) has roads that radiate from a central point.

- A unplanned irregular
- B grid iron
- C planned irregular
- D radial

4.1.4 The ... land use model is flexible and resembles many cities in the developed world.

- A concentric
- B sector
- C multiple nuclei
- D urbanisation

4.1.5 Minimum number of customers needed to make a business profitable is called the ...

- A threshold population.
- B range.
- C sphere of influence.
- D market.

4.1.6 ... towns are urban settlements with one dominant function.

- A Junction
- B Specialised
- C Central place
- D Trade of transport

4.1.7 Retail business found along major roads with massive parking space to attract customers are referred to as ... shopping centres.

- A outlying business
- B planned neighbourhood
- C commercial ribbon
- D planned regional

(7 x 1) (7)

4.2 Choose the correct word(s) from those given in brackets to make each of the statements TRUE. Write only word(s) next to the question numbers (4.2.1–4.2.8) in the ANSWER BOOK.

- 4.2.1 Balance of (trade/payment) is the difference in value between a country's imports and exports.
- 4.2.2 No access to nutritional food for people in a country is known as (food security/food insecurity).
- 4.2.3 A/An (unfavourable/favourable) balance of trade exists in a country when the value of the exports is greater than the value of imports.
- 4.2.4 (GDP/GNP) refers to the total value of goods and services produced in a country by the permanent inhabitants in one year.
- 4.2.5 (Sugar cane/Maize) is mainly farmed in KwaZulu-Natal.
- 4.2.6 The (primary/secondary) sector makes the greatest contribution to the economy of South Africa.
- 4.2.7 (Free trade/Protectionism) is most likely to cause local production to decrease and unemployment.
- 4.2.8 Value added to a raw material by means of processing is called (beneficiation/genetic modification). (8 x 1) (8)

4.3 FIGURE 4.3 is a cartoon on rural depopulation.

- 4.3.1 Define the term *rural depopulation*. (1 x 1) (1)
- 4.3.2 List evidence of rural depopulation mentioned in the cartoon. (2 x 1) (2)
- 4.3.3 What is so ironic (opposite in meaning) about the purpose of the scarecrow in the cartoon? (1 x 2) (2)
- 4.3.4 State the lack of TWO basic services that would cause rural depopulation. (2 x 1) (2)
- 4.3.5 Discuss the social consequences in rural areas as a result of rural depopulation. (2 x 2) (4)
- 4.3.6 Explain why the policy of land redistribution will only increase rural depopulation. (2 x 2) (4)

4.4 FIGURE 4.4 is a photograph of an urban land-use zone.

- | | | | |
|-------|---|---------|-----|
| 4.4.1 | What is an urban <i>land-use zone</i> ? | (1 x 1) | (1) |
| 4.4.2 | Name the urban land-use zone in the photograph. | (1 x 1) | (1) |
| 4.4.3 | State ONE specialised requirement for this urban land-use zone that is evident in the photograph. | (1 x 1) | (1) |
| 4.4.4 | Discuss why this land-use zone can be considered to be an environmental injustice. | (2 x 2) | (4) |
| 4.4.5 | In a paragraph of approximately EIGHT lines, explain the compatibility between infrastructure and this land-use zone. | (4 x 2) | (8) |

4.5 Refer to FIGURE 4.5, an extract based on the informal sector.

- | | | | |
|-------|---|---------|-----|
| 4.5.1 | How many people are unemployed, according to the extract? | (1 x 1) | (1) |
| 4.5.2 | Quote evidence to justify that unemployment is a serious problem. | (1 x 1) | (1) |
| 4.5.3 | According to the article, why is the informal sector important? | (1 x 1) | (1) |
| 4.5.4 | Discuss some of the challenges experienced by people in the informal sector. | (2 x 2) | (4) |
| 4.5.5 | In a paragraph of approximately EIGHT lines, explain the negative impact that the informal sector has on the formal sector. | (4 x 2) | (8) |

4.6 FIGURE 4.6 is a map showing the core industrial regions in South Africa.

- | | | | |
|-------|---|---------|-----|
| 4.6.1 | Name the core industrial region labelled 3 . | (1 x 1) | (1) |
| 4.6.2 | What is the main locational difference between industrial regions 1 and 4 ? | (1 x 2) | (2) |
| 4.6.3 | How has this locational difference (mentioned in QUESTION 4.6.2) influenced the main type of industry that has been developed at 4 ? | (1 x 2) | (2) |
| 4.6.4 | How has this industry (your answer to QUESTION 4.6.3) improved the skills of workers in the region? | (1 x 2) | (2) |
| 4.6.5 | Discuss the physical (natural) factors that have favoured the development of industrial region 1 . | (2 x 2) | (4) |
| 4.6.6 | Explain the negative social impact that industrial centralisation has had at regions 1 and 4 . | (2 x 2) | (4) |

[75]

GRAND TOTAL: 225