![Province of the Eastern Cape Education logo]

EXAMINATIONS AND ASSESSMENT CHIEF DIRECTORATE
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REPUBLIC OF SOUTH AFRICA, Website: www.ecdoe.gov.za

SUBJECT	GEOGRAPHY			
QUESTION PAPER	1	**X2**	3	
DURATION OF QUESTION PAPER	**3 HOURS**			
PROVINCE	**EASTERN CAPE**			
DATES OF MARKING	**6 – 22 DECEMBER 2022**			

SECTION 1: (General overview of Learner Performance in the question paper as a whole)

- The question paper for Geography paper 2 was generally set within the capabilities of grade 12 Geography learners. The general performance of 2022 Geography learners in Geography paper 2 is expected to be better than the performances in the previous academic year. This is because 2022 academic year was more stable than the previous year. There were no unplanned school closures and several intervention programmes for both learners and teachers were implemented.
- The overall average percentage obtained by 2022 cohort of Geography learners is 54% compared to 52% obtained by 2021 group of Geography paper 2 learners. The increase of 2% is recorded.
- It is important to indicate that scores that are cited in this report are based on the RASCH analysis of the 100 scripts selected randomly from the 12 education districts of the Eastern Cape province. The sampled scripts were selected to cover low (20%), medium (60%) and high (20%). Further, individual scripts were then subjected to an in-depth scrutiny of different responses learners provided. The main objective was to identify weaknesses and misconceptions that cost them marks.
- Included in this report are findings that markers, senior markers and deputy chief markers came across during the marking process.
- We hope that the outputs of this report will be used by Geography teachers, subject advisors and teacher development to improve the quality of teaching Geography and consequently learner performance in the Eastern Cape Province.
- The graph below illustrates how learners performed in Geography Paper 2 in 2021 and 2022.

Overview performance Geo. P2 (2021 & 20220
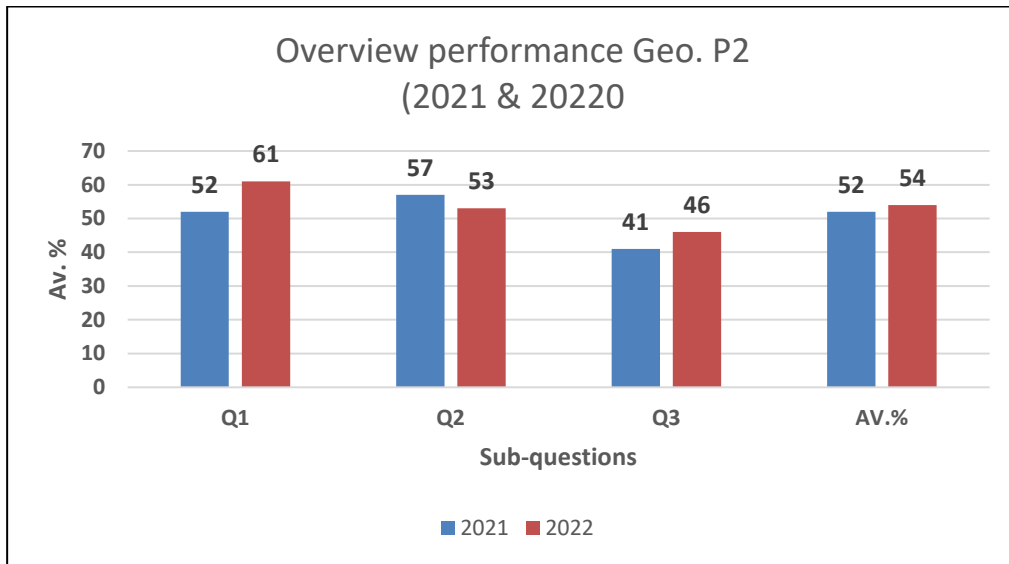
- It is evident from the graph that learners performed relatively better in Questions 1 and 2 in 2022 than in 2021. However, the 2021 cohort of learners did well in question 2.
- It is pleasing to note that there is an improvement in performance in question 3 than the previous year.

SECTION 2: Comment on candidates' performance in individual questions
(It is expected that a comment will be provided for each question on a separate sheet).

QUESTION 1

(a) General comment on the performance of learners in the specific question. Was the question well answered or poorly answered?

- The overall performance in Question 1 improved from 52% (2021) to 61% (2022). An increase of 9% was recorded. However, performance in sub-questions was not as good as the previous year.
- For example, questions 1.1 and 1.2 performance were not as expected. These questions were purely based on a wide range of concepts drawn from rural and urban settlements.
- The graphs below show how learners performed in each sub-question.
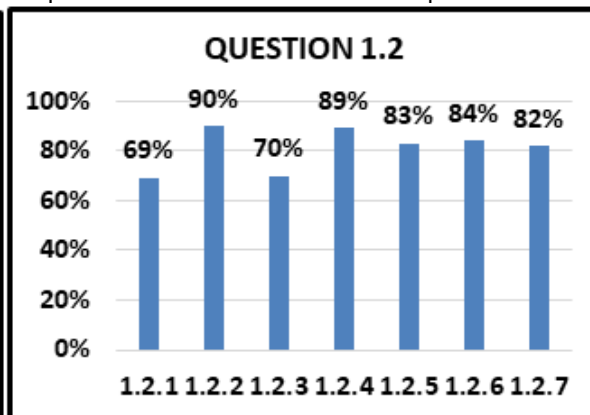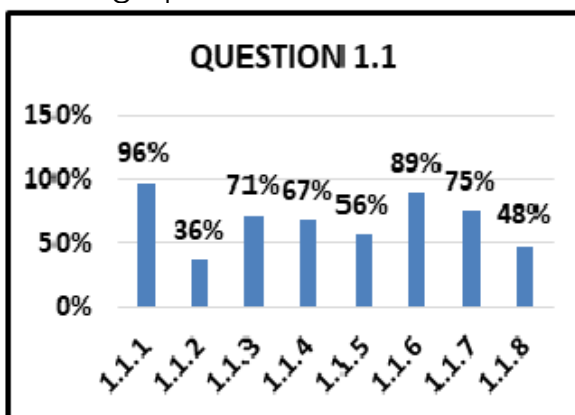
- It is evident that learners did not do well in question 1.1 compared to question 1.2. The lowest mark obtained in question is 36% (Q1.1.2) whilst in question 1.2 is 69%. (Q1.2.1) The highest mark is 96% (Q1.1) and 90% (Q1.2) respectively.

Why was the question poorly answered? Also provide specific examples, indicate common errors committed by learners in this question, and any misconceptions.

- Basically, the two sub-questions required learners to know and apply concepts.
- Learners did not know the difference between site and situational factors and how these concepts are linked to settlement patterns. (Q1.1.2) as well as the difference between wet-point and dry-point settlements (Q1.1.5).
- In Q 1.1.8, learners could not differentiate between physical and human factors and as such lost marks.

Provide suggestions for improvement in relation to Teaching and Learning

- The difference between site and situational as well as pattern can be taught at the same time.
- It should be emphasised that site is determined mainly by physical/ natural factors.
- Where water is scarce, settlements are clustered around a water source. And where water is abundant, readily available, settlements become scattered/dispersed.
- Similarly, where water is a threat, settlements occupy dry patches (dry-point settlement) and where there is scarcity of water, settlements are situated around a source of water (wet-point settlements).

Why was the question poorly answered? Also provide specific examples, indicate common errors committed by learners in this question, and any misconceptions.

- The question in 1.3 focused on land reform.
- The learners performed well in 1.3 sub-question. the average mark of 63.3% was recorded.
- The graph below illustrates how leaners performed in individual questions of sub-question 1.3

QUESTION 1.3

	1.3.1	1.3.2	1.3.3a	1.3.3b	1.3.4	1.3.5
	54.5%	84.0%	75.0%	65.0%	38.5%	63.3%
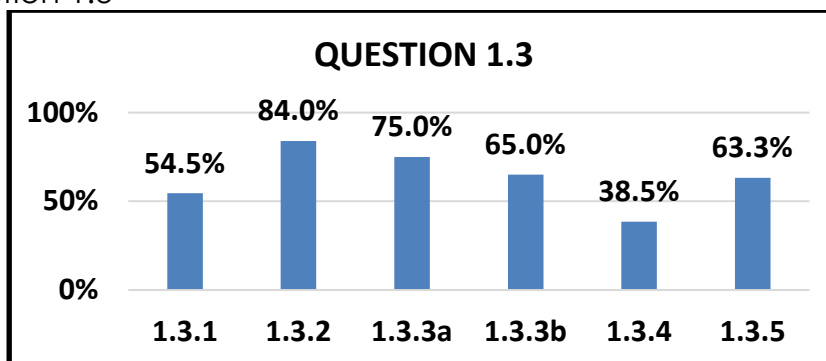
- It is evident that learners struggled with questions 1.3.1(54.5%) and 1.3.4.(38.5%)

Why was the question poorly answered? Also provide specific examples, indicate common errors committed by learners in this question, and any misconceptions.

- Once again, learners struggled to define fully the concept of land reform (Q1.3.1).
- Learners failed to distinguish between question 1.3.3 and 1.3.4. They ended up lifting responses from the extract and this cost them marks
- Learners perceive extracts and case studies as comprehension passages. This is a misconception. Extractive questions are allocated 1 mark whereas questions that require in-depth understanding are usually 2 marks. Therefore, mark allocation can be used as a clue of the type of expected response.

- Generally, learners did not perform well in Q1.4 sub-question. The highest mark of 91% (Q.1.4.2) and lowest mark 33% (Q1.4.4) were recorded. The average mark recorded is 52,4%.
- The bar graph below illustrates how learners performed in sub-question of Q1.4
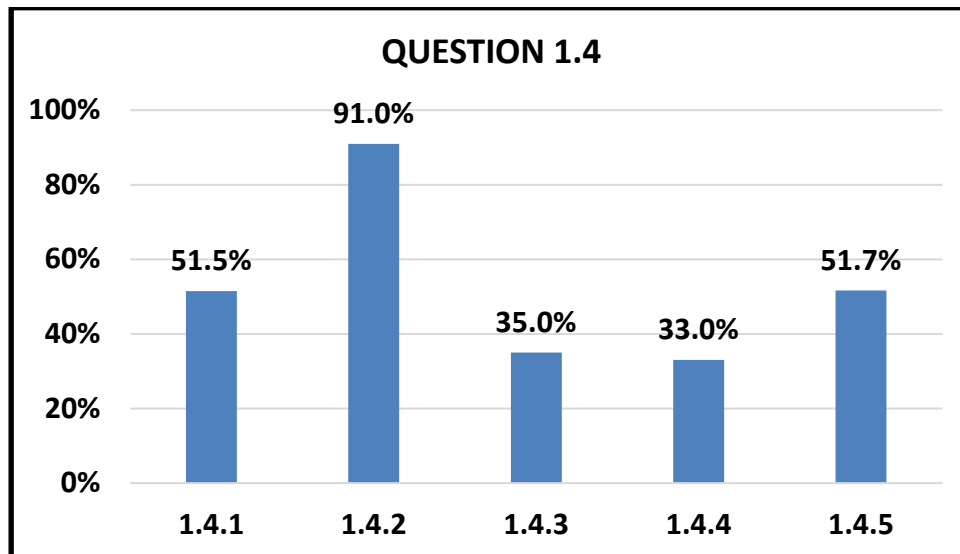
QUESTION 1.4

	1.4.1	1.4.2	1.4.3	1.4.4	1.4.5
	51.5%	91.0%	35.0%	33.0%	51.7%

Why was the question poorly answered? Also provide specific examples, indicate common errors committed by learners in this question, and any misconceptions.

- In this sub-question, learners could not define density (Q1.4.3) and respond to Q1.4.4. learners mostly reproduced the extract. They had limited understanding of what is meant by "dilapidated". The answers they gave were about the characteristics of the transition zone instead of answering why this land-use zone has high land values despite being dilapidated.
- Question 1.5 was fairly answered. The highest score recorded was 75% (Q1.5.2) and the lowest mark was 60%.
- The graph below shows general performance in this sub-question.
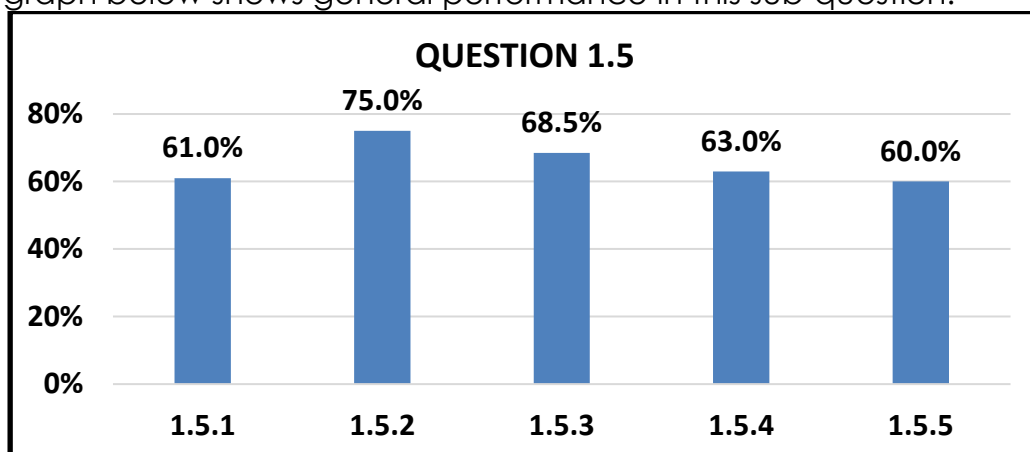
QUESTION 1.5

	1.5.1	1.5.2	1.5.3	1.5.4	1.5.5
	61.0%	75.0%	68.5%	63.0%	60.0%

Why was the question poorly answered? Also provide specific examples, indicate common errors committed by learners in this question, and any misconceptions.

- Learners answered this sub-question well as the extract was easy to read and understand.
- Responses for Q1.5.2(75%) and Q1.5.3 (68.5%) could be derived from the extract.
- Learners did not find (Q1.5.5), suggest question, difficulty to handle. Hence the average mark of 60% was recorded.

Provide suggestions for improvement in relation to Teaching and Learning

- Teachers to develop a glossary of concepts for every topic. Concepts should be written in the learner's notebook but be used as a foundation for lesson preparations.
- All concepts must be taught as they appear in the examination Guidelines. Follow the order/sequence.
- Thorough teaching of urban settlement issues is needed. Cover all urban and give summaries in the form of examples.
- Teachers to spend time to unpack the EXPLAIN WHY and HOW questions. These types of questions carry 6(40%) to 8(53.3%) marks in a 15-mark question. one would score high marks by answering these types of questions correctly.
- Finally, teachers must not treat extracts/case studies as comprehension passages. Use them as stimulus materials regarding the topic.

QUESTION 2

(a) General comment on the performance of learners in the specific question. Was the question well answered or poorly answered?

- The general performance in question 2 in 2022 declined by 4% from the 2021 cohort of learners i.e. 57% (2021) to 53% (2022). Question 2 was based on economic Geography of south Africa. In this section there is content that is prescribed for each academic year.

The graphs below show how learners performed in each sub-question (Q2.1 to Q2.5)

QUESTION 2.1

Sub-question	Percentage
2.1.1	55,6%
2.1.2	30,3%
2.1.3	57,0%
2.1.4	81,0%
2.1.5	69,0%
2.1.6	67,0%
2.1.7	67,0%
2.1.8	63,0%

QUESTION 2.2

Sub-question	Percentage
2.2.1	76,0%
2.2.2	74,0%
2.2.3	65,0%
2.2.4	60,0%
2.2.5	58,0%
2.2.6	80,0%
2.2.7	53,0%

QUESTION 2.3

Sub-question	Percentage
2.3.1	59,0%
2.3.2	100,0%
2.3.3	83,0%
2.3.4	80,5%
2.3.5	44,8%

QUESTION 2.4

Sub-question	Percentage
2.4.1	82,0%
2.4.2	89,0%
2.4.3	95,0%
2.4.4	26,0%
2.4.5	63,5%
2.4.6	40,5%

QUESTION 2.5

Sub-question	Percentage
2.5.1	21,5%
2.5.2	28,0%
2.5.3	73,5%
2.5.4	36,0%
2.5.5	24,8%

- It is evident form the graphs that learner performance varied from sub-questions Q2.1 to 2.5.
- Questions 2.1 and 2.2 were based on a variety concept drawn from sub-topics covered in Economic geography of South Africa. Leaners here performed relatively better than in Questions 2.3;2.4 and 2.5.
- Question 2.3(Food security); Question 2.4 (Gold as a prescribed mineral for 2022 November/2023 June); Question 2.5 (Dube TradePort as a prescribed IDZ for 2022 November/2023 June).
- It is important to mention here that for the prescribed content/product Geography teachers have no choice but to teach it.

(b)Why was the question poorly answered? Also provide specific examples, indicate common errors committed by learners in this question, and any misconceptions.

The drop-in performance in question 2 in 2022 academic year could be attributed to the following factors:

o Learners struggled to fully define concepts (food security-Q2.3.1). The accessible part in the definition was always missing. In question 2.5.1, learners had little knowledge of what Industrial Development Zone (IDZ)is. This sub-question scored the lowest percentage (21.5%) in the entire question 2.

o All questions that needed candidates to apply high thinking skills, explain how questions, (2.3.5,2.4.6 and 2.5.5), posed a great challenge. Here candidates missed the action words "EXPLAIN and HOW". They only provided facts/issues without qualification/motivation.

o Both questions based on prescribed content for 2022 academic year, had the lowest average scores, especially Q 2.5.

o Learners have challenges in responding to questions based on infographic.

Provide suggestions for improvement in relation to Teaching and Learning

- Emphasis must be put on the responses expected based on action words
- Teachers must work hand in hand with teachers teaching Economics. This will enhance their understanding of how the economy of South Africa works.
- Prepare and teach the prescribed content.
- Research on the topics. Use Internet, PowerPoint presentations. There are a lot of supplementary on these topics
- For 2023 academic year, refer to 2021 Geography Examination Guidelines (pages 13-16) on what is expected to be taught.
- Teacher Development to organize workshops for teachers and Subject Advisors on how to teach and answer questions based on infographic.

QUESTION 3

(a) General comment on the performance of learners in the specific question. Was the question well answered or poorly answered?

- The 2022 cohort of learners managed to do relatively better in question 3 than the previous year's learners. The average mark percentage of 46% (2022) was recorded compared to 40.6% (2021). An improvement of 5.4%.
- However, performance in GIS was very disappointing.
- The graphs below illustrate how candidates performed in each of the three sub-questions.
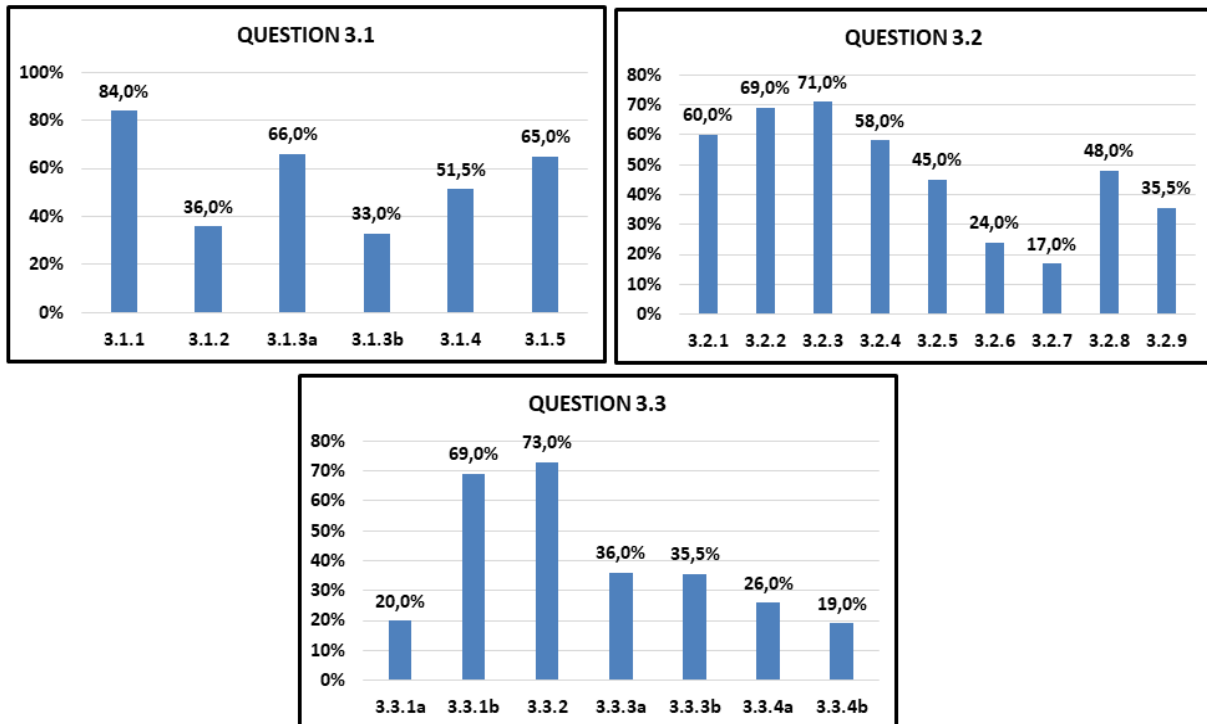
QUESTION 3.1

QUESTION 3.2

QUESTION 3.3

(b)Why was the question poorly answered? Also provide specific examples, indicate common errors committed by learners in this question, and any misconceptions.

- Lack of basic map reading skills
- Learners can not measure accurately and cannot use map scale appropriately to come up with real word measurements
- Units of measurements are mixed up i.e. centimeters with meters
- candidates apply rote learning in dealing with map calculations. They do not understand the processes involved. In all questions where a part of a problem is provided or removed, they score low marks (Q3.1.2)

Provide suggestions for improvement in relation to Teaching and Learning

- The use of the Exam Guidelines during lesson preparations is paramount.
- Provide learners with the copies of the Examination Guidelines. This will assist them in self-study.
- Always work with topographical and orthophoto maps in context for questions that require identification and interpretation of map features.
- More workshops to be given quarterly.
- Mapwork should be taught for each Geography topic. Every Geography lesson is mapwork lesson.
- Have road shows for Geography Examiners.

basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL
SENIOR CERTIFICATE

GRADE 12

MARKS: 150

TIME: 3 hours

This question paper consists of 19 pages.

GEOGE2

INSTRUCTIONS AND INFORMATION

1.   This question paper consists of TWO sections.

        SECTION A
        QUESTION 1: RURAL AND URBAN SETTLEMENTS (60)
        QUESTION 2: ECONOMIC GEOGRAPHY OF SOUTH AFRICA (60)

        SECTION B
        QUESTION 3: GEOGRAPHICAL SKILLS AND TECHNIQUES (30)

2.   Answer ALL THREE questions.

3.   ALL diagrams are included in the QUESTION PAPER.

4.   Leave a line between the subsections of questions answered.

5.   Start EACH question at the top of a NEW page.

6.   Number the answers correctly according to the numbering system used in this
        question paper.

7.   Do NOT write in the margins of the ANSWER BOOK.

8.   Draw fully labelled diagrams when instructed to do so.

9.   Answer in FULL SENTENCES, except when you have to state, name, identify
        or list.

10.   Units of measurement MUST be indicated in your final answer,
        e.g. 1 020 hPa, 14 °C and 45 m.

11.   You may use a non-programmable calculator.

12.   You may use a magnifying glass.

13.   Write neatly and legibly.

SPECIFIC INSTRUCTIONS AND INFORMATION FOR SECTION B

14.   A 1 : 50 000 topographic map 2931CA VERULAM and a 1 : 10 000 orthophoto
        map 2931 CA 11 VERULAM are provided.

15.   The area demarcated in RED/BLACK on the topographic map represents the
        area covered by the orthophoto map.

16.   Marks will be allocated for steps in calculations.

17.   You must hand in the topographic and orthophoto map to the invigilator at the
        end of this examination.

SECTION A: **RURAL AND URBAN SETTLEMENTS AND THE ECONOMIC GEOGRAPHY OF SOUTH AFRICA**

QUESTION 1:   **RURAL AND URBAN SETTLEMENTS**

1.1   Various options are provided as possible answers to the following questions. Choose the answer and write only the letter (A–D) next to the question numbers (1.1.1 to 1.1.8) in the ANSWER BOOK, e.g. 1.1.9 D.

    1.1.1   Rural settlements are associated with … activities.

       A   primary
       B   secondary
       C   tertiary
       D   quaternary

    1.1.2   A dispersed settlement pattern develops when there is …

       A   one dominant water source.
       B   an abundance of water.
       C   a narrow river valley.
       D   communal ownership of land.

    1.1.3   An advantage of a rural nucleated settlement:

       A   Sharing of farm equipment
       B   Large, commercial plots of land
       C   Making independent decisions
       D   Making large profits

    1.1.4   A … is the location of a settlement in relation to the surrounding area.
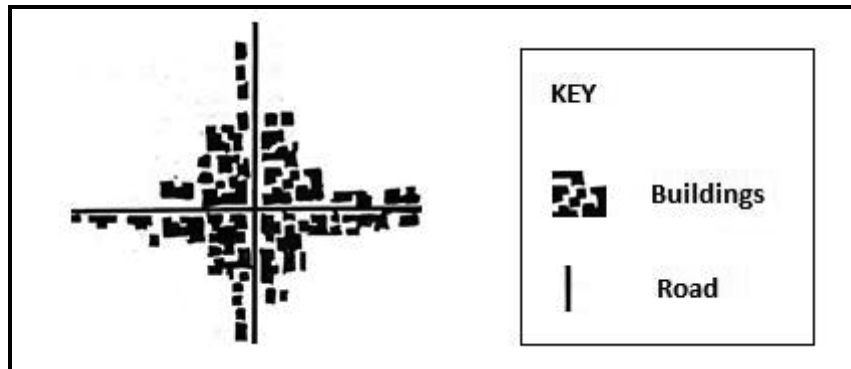
       A   gap
       B   site
       C   bridging point
       D   situation

    1.1.5   A dry-point settlement is located … water because water is …

       A   far from; scarce.
       B   far from; a threat.
       C   near; a threat.
       D   near; scarce.

1.1.6   The sketch below refers to a … shaped settlement.

[Adapted from https://www.google.com/search?q=types+of+settlements]

A   round
B   semi-circular
C   crossroad
D   linear

1.1.7   The circular shape of the settlement below is influenced by the …

[Adapted from https://www.google.com/search?q=types+of+settlements]
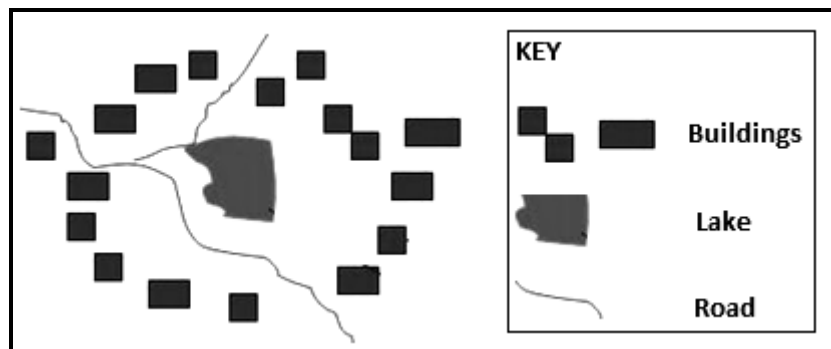
A   lake.
B   coastline.
C   terrain.
D   roads.

1.1.8   The following physical factors determine the site of a settlement:

(i)   Accessibility to transport
(ii)   Distance to market
(iii) Relief
(iv)   Fertile soil

A   (i) and (ii)
B   (ii) and (iii)
C   (ii) and (iv)
D   (iii) and (iv)   (8 x 1)   (8)

1.2   Choose the word/term from COLUMN B that matches the statement in COLUMN A. Write only **Y** or **Z** next to the question numbers (1.2.1 to 1.2.7) in the ANSWER BOOK, e.g. 1.2.8 **Y**.

COLUMN A		COLUMN B	
1.2.1	Process whereby an increasing percentage of the country's population is concentrated in urban areas	**Y** **Z**	urbanisation level of urbanisation
1.2.2	Increase in the number of people living in urban areas	**Y** **Z**	rate of urbanisation urban growth
1.2.3	Process whereby people move from urban areas into surrounding rural areas	**Y** **Z**	centralisation counter-urbanisation
1.2.4	Increase in the actual physical size of an urban area	**Y** **Z**	urban expansion urban hierarchy
1.2.5	Unplanned spread of urban areas	**Y** **Z**	urban sprawl urban decay
1.2.6	Decreasing number of people living in rural areas	**Y** **Z**	rural-urban migration rural depopulation
1.2.7	Arrangement of settlements in an area from the smallest to the largest	**Y** **Z**	hierarchy metropolis

(7 x 1)   (7)

1.3   Refer to the sources below on land reform in South Africa.

A FRESH APPROACH TO LAND REFORM

South Africa currently faces a problem as the process of land reform has advanced too slowly and much of the land that has been transferred has become economically inactive.

Conflicting (different) views cause South Africans to have questions about land reform. What is the future of land reform in South Africa? Can the process be accelerated? Will it produce equal outcomes? Whose interests will be served?

At a South African agricultural congress, a panel discussion on the future of land reform agreed that, when it comes to successful land reform, intense negotiations and compromises are necessary. This is in keeping with the three pillars of land reform, namely redistribution, tenure and restitution. Land restitution provides a challenge as funding needs to be allocated to compensate dispossessed communities for land previously lost. Well-managed land reform can create assets for the poor, stabilise relationships and promote development. On the other hand, if it is poorly managed, it destroys assets, causes poverty to communities and weakens the economy.

[Adapted from http://www.landreformfutures.org/]

Poorly managed	Well managed

[Adapted from http://www.landreformfutures.org/]
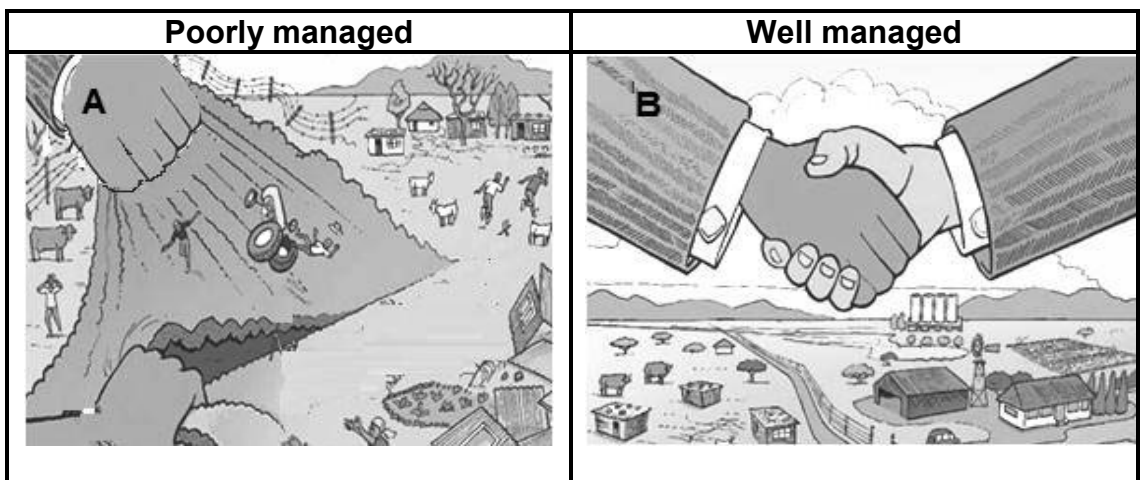
1.3.1   What is *land reform*?   (1 x 2)   (2)

1.3.2   According to the extract, what is the benefit of well-managed land reform?   (1 x 1)   (1)

1.3.3   (a)   Why is land restitution considered a challenge?   (1 x 2)   (2)

         (b)   How does **B** illustrate the successful process of land restitution?   (1 x 2)   (2)

1.3.4   Which factors have caused the 'process of land reform' to advance too slowly?   (2 x 2)   (4)

1.3.5   Explain the social benefits of well-managed land reform for people living in rural areas.   (2 x 2)   (4)

1.4   Refer to the infographic below on the central business district (CBD) of Johannesburg as a land-use zone.

HIGH

Land Value

LOW

A B   C   D

A CBD
B Transition zone
C High income residential
D Outlying business district

The CBD of Johannesburg has experienced a decline in economic investment over the past 20 years. This has been due to problems such as crime, inefficient public transport, decay, decreased accessibility, etc. These factors force businesses to relocate to outlying business districts, giving rise to commercial decentralisation. In spite of this, the land values remain high in the CBD. The transition zone is generally dilapidated, but maintains high land values.

[Adapted from businesstech.co.za]

[Adapted from *The Journal of the Helen Suzman Foundation,* Issue 69, June 2013]

1.4.1   State TWO characteristics of the Johannesburg CBD that is evident in the photograph.   (2 x 1)   (2)

1.4.2   Which land-use zone has the highest land value, as indicated on the graph?   (1 x 1)   (1)

1.4.3   How does the land value (answer to QUESTION 1.4.2) influence the building density of the CBD?   (1 x 2)   (2)

1.4.4   Why is the transition zone generally dilapidated despite high land values?   (2 x 2)   (4)

1.4.5   Why is the outlying business district (OBD) attractive for the relocation of businesses?   (3 x 2)   (6)

1.5　　　Refer to the extract below on informal settlements.

FLOODS CAUSE DESTRUCTION TO INFORMAL SETTLEMENTS IN ETHEKWINI MUNICIPALITY

18 April 2022 −12:45

The recent flooding in Ethekwini and surrounding areas has claimed hundreds of lives. Families were displaced from informal settlements, worsening the housing problem many already face.

Rapid urbanisation and government failure to deliver sufficient formal housing are among the driving forces behind the increased number of informal settlements. The unavailability of suitable land for housing is due to limited progress made with regard to land policies. This, in turn, is slowing down the ability of local governments to provide sufficient housing in areas that are not prone to disasters like flooding.

The result is that a quarter of South Africa's urban population is living in informal settlements built wherever people find open spaces that are prone to disasters. They lack basic amenities and infrastructure, such as proper roads and storm-water drainage systems. Many informal settlements are situated near water sources and low-lying areas which increases the flood risk.

[Adapted from ewn.co.za]

1.5.1　　What is an *informal settlement*?　　　　　　　　　　　(1 x 2)　　(2)

1.5.2　　Quote a reason from the extract for the increase in the number of informal settlements in Ethekwini.　　　　　　　(1 x 1)　　(1)

1.5.3　　Why are informal settlements in Ethekwini at risk of flooding?　　(1 x 2)　　(2)

1.5.4　　How would the lack of proper roads negatively impact on emergency services to reach informal settlements in times of disasters, like floods?
　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　(1 x 2)　　(2)

1.5.5　　In a paragraph of approximately EIGHT lines, suggest measures to prevent flood-related disasters in informal settlements in the Ethekwini Municipality.　　　　　　　　　　　　　　　　(4 x 2)　　(8)
　　　　　　　　　　　　　　　　　　　　　　　　　　　　　[60]

QUESTION 2: ECONOMIC GEOGRAPHY OF SOUTH AFRICA

2.1 Refer to the table below based on economic activities. Various options are provided as possible answers to the following questions. Choose the answer and write only the letter (A–D) next to the question numbers (2.1.1 to 2.1.8) in the ANSWER BOOK, e.g. 2.1.9 D.

| GROSS DOMESTIC PRODUCT	2020 R301,92 billion	2021 R351,43 billion
	RANDS IN MILLIONS	
Utilities	100 789	104 317
Transport	342 443	335 001
Services	1 052 692	10 607 113
Public administration	368 503	369 805
Mining	213 459	220 293
Manufacturing	520 626	506 343
Construction	108 604	111 021
Agriculture	127 960	114 030

[Adapted from https://www.statssa.gov.za/?p=15273]

2.1.1 The … of a country refers to the total value of goods and services produced by the permanent inhabitants of the country.

     A   gross national product
     B   gross domestic product
     C   balance of trade
     D   trade agreement

2.1.2 South Africa's gross domestic product (GDP) enables one to compare …

     A   employment rates.
     B   economies of other countries.
     C   standards of living.
     D   imports and exports.

2.1.3 The primary economic activity that contributed the most to the GDP in 2020 and 2021:

     A   Utilities
     B   Agriculture
     C   Services
     D   Mining

       Please turn over

2.1.4   The tertiary economic activity that contributes the most to South Africa's GDP:

         A   Services
         B   Utilities
         C   Public administration
         D   Transport

2.1.5   Construction is an example of a … economic activity.

         A   primary
         B   secondary
         C   tertiary
         D   quaternary

2.1.6   The economic activity that showed a decrease from 2020 to 2021:

         A   Utilities
         B   Services
         C   Construction
         D   Agriculture

2.1.7   The economic activity that contributed the most to the secondary sector in 2021:

         A   Construction
         B   Services
         C   Manufacturing
         D   Utilities

2.1.8   TWO statements below are TRUE with respect to the sector contributions made to South Africa's GDP:

         (i)   Primary sector contributes the least.
         (ii)   Secondary sector contributes the least.
         (iii)   Quaternary sector contributes the most.
         (iv)   Tertiary sector contributes the most.

         A   (i) and (ii)
         B   (i) and (iv)
         C   (ii) and (iii)
         D   (i) and (iii)   (8 x 1)   (8)

2.2   Match each type of industry in the diagram below with the descriptions that follow. Write only the type of industry next to the question numbers (2.2.1 to 2.2.7) in the ANSWER BOOK, e.g. 2.2.8 Factory.
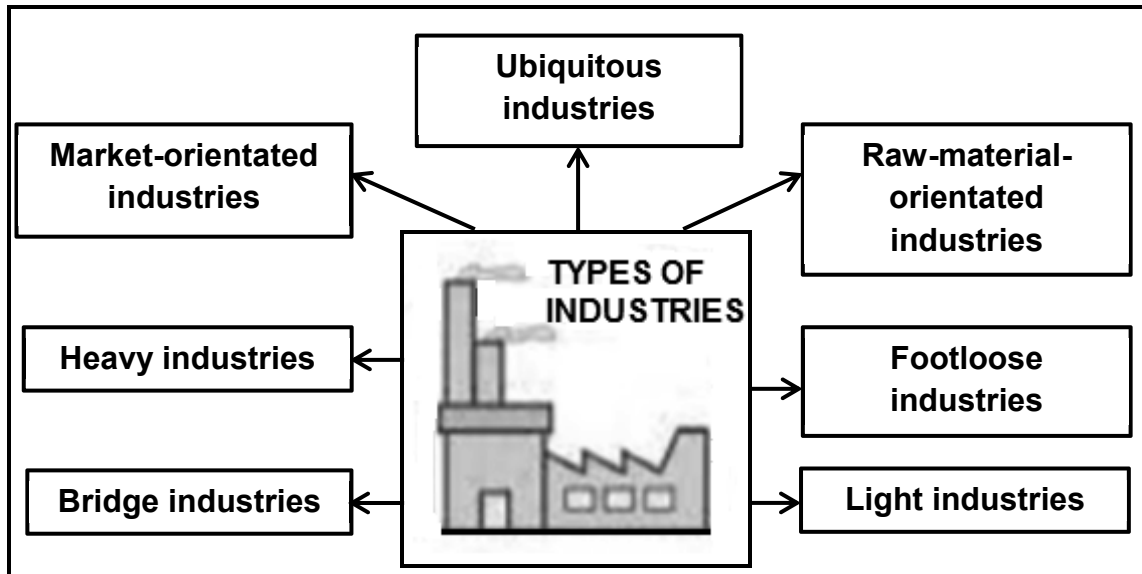
[Source: Examiner's own sketch]

2.2.1   Located close to customers

2.2.2   The availability of different modes of transport is important

2.2.3   Need large amounts of flat land on the outskirts of built-up areas

2.2.4   Location is not determined by any specific factors

2.2.5   Located in built-up areas as there is little air and noise pollution

2.2.6   Location is determined by bulky unprocessed materials

2.2.7   Telkom is an example of this type of industry   (7 x 1)   (7)

2.3   Refer to the extract below on food security.

FOOD SECURITY IN SOUTH AFRICA 2020–2021

According to a report released by Statistics South Africa, *Measuring Food Security in South Africa: Applying the Food Insecurity Experience Scale*, almost 23,6 per cent of South Africans were affected by moderate to severe food insecurity in 2021.

Statistics South Africa (Stats SA) has been working on improving its measurement of food security and recently introduced the Food Insecurity Experience Scale. Since food insecurity is a global phenomenon, it is important to measure it using tools that guarantee comparability across countries.

Health pandemics, such as Covid-19, has denied many South Africans their right to adequate food as indicated in the South African Constitution. This has undermined the efforts that have been made to meet the National Development Plan's goal of 'Zero Hunger' by 2030.

[Adapted from https://www.statssa.gov.za/?p=15273]

2.3.1   Define the concept *food security.*   (1 x 2)   (2)

2.3.2   What percentage of South Africans experienced food insecurity in 2021?   (1 x 1)   (1)

2.3.3   What is the importance of the Food Insecurity Experience Scale according to the extract?   (1 x 2)   (2)

2.3.4   Suggest how health pandemics, such as Covid-19, lead to food insecurity in South Africa.   (1 x 2)   (2)

2.3.5   In a paragraph of approximately EIGHT lines, explain how the South African government can assist farmers in achieving 'Zero Hunger' by 2030.   (4 x 2)   (8)

2.4   Refer to the infographic below based on gold production in South Africa between 1970 and 2020.

South Africa was the world's largest producer of gold, as only 50 years ago, South Africa produced more than 1 000 tons of gold per year. Production peaked in 1970, but has since then been falling steadily and sharply. Labour issues, such as strike actions, have also contributed to reduced gold production.

The nearly 80% fall in South African gold production has led to it being overtaken by China, Australia and the United States of America recently.

[Adapted from https://www.google.com/search?q=gold+mining+statistics+South+Africa]

COMPARISON OF GOLD PRODUCTION PER TONS PRODUCED			
	1970	**1990**	**2020**
South Africa	1 000	600	101
China	10	100	380
Russia	0	150	300
Australia	40	230	330
United States of America	50	300	190

[Adapted from https://www.researchgate.net/figure/Top-Five-Gold-Producing-Countries]

2.4.1   According to the graph, state the trend in South Africa's gold production from 1970 to 2020.   (1 x 1)   (1)

2.4.2   How many tons of gold did South Africa produce in 2020, according to the table?   (1 x 1)   (1)

2.4.3   According to the table, which country was the leading gold producer in 2020?   (1 x 1)   (1)

2.4.4   State TWO physical factors that favoured South Africa as the leading producer of gold in 1970.   (2 x 2)   (4)

2.4.5   Suggest TWO factors that resulted in a reduction of gold production from 1990 to 2020.   (2 x 2)   (4)

2.4.6   Explain how a reduction in South Africa's gold production will impact negatively on its economic growth.   (2 x 2)   (4)

2.5   Refer to the infographic below on the Dube TradePort Industrial Development
        Zone (IDZ).

FACT FILE: DUBE TRADEPORT

- Largest greenfield airport development in Africa and the only one in South Africa covering more than 3 800 hectares (38 km²).
- Located 30 km north of Durban.
- 45 km away from the busiest cargo port in Africa, which is the Durban Harbour.
- Comprises five business zones: Dube TradeZone, Dube Cargo Terminal, Dube AgriZone, Dube City, Dube iConnect.

NOTE: A greenfield development takes place on a vacant site that has not been developed previously.

[Adapted from invest@dubetradeport.co.za]

ADVERTISEMENT TO ATTRACT INVESTMENT AND INDUSTRIES TO THE DUBE TRADEPORT INDUSTRIAL DEVELOPMENT ZONE

[Adapted from DubeTradePort.slideshare.net]

2.5.1   What is an *industrial development zone*?   (1 x 2)   (2)

2.5.2   What transport infrastructure makes the Dube TradePort IDZ unique compared to other IDZs in South Africa, according to the fact file?   (1 x 1)   (1)

2.5.3   State TWO factors on the map that resulted in greater accessibility to the Dube TradePort IDZ.   (2 x 1)   (2)

2.5.4   Describe TWO advantages regarding infrastructure that the Dube TradePort IDZ could offer to attract industries.   (2 x 2)   (4)

2.5.5   Explain how the Dube TradePort IDZ would upskill (improve) labour in the province.   (3 x 2)   (6)

[60]

TOTAL SECTION A: 120

SECTION B

QUESTION 3:   GEOGRAPHICAL SKILLS AND TECHNIQUES

GENERAL INFORMATION ON VERULAM

Coordinates: 29°35'S; 31°0'E

The town of Verulam is 170 years old and located to the north of Durban. It has a population of over 60 000 people. Verulam consists of densely populated residential and industrial areas like Canelands. On the outskirts are large farming areas where the main crop grown is sugar cane. There has been slow but steady progress in modernising the town by providing improved infrastructure to the rural areas.

The Hazelmere Dam, just a few kilometres north of Verulam, is the main source of water for the area and is used for a variety of activities, such as watersports and fishing. One of the main rivers that flows through Verulam is the Mdloti River in which the Hazelmere Dam has been built. An interesting fact is that Verulam is the only town in the world where the main street (Wick Street) ends in a river.

[Adapted from https://www.google.com/search?q=map+of+verulam]

The following English terms and their Afrikaans translations are shown on the topographic map:

ENGLISH	**AFRIKAANS**
International airport	Internasionale lughawe
River	Rivier
Bridge	Brug
Furrow	Voor

3.1   **MAP SKILLS AND CALCULATIONS**

Refer to the topographic map and the orthophoto map.

3.1.1   The contour interval of the orthophoto map is (5 m/20 m).   (1 x 1)   (1)

3.1.2   Which vertical exaggeration would give the most detailed indication of the landforms on a cross-section?

A   2 times
B   5 times
C   10 times
D   20 times   (1 x 1)   (1)

3.1.3   Complete the grid reference/coordinates of spot height **114** in block **C3** on the topographic map. Write down only the information that is not included in the question.

(a)   __° 37' 42"S

(b)   31° __' __"E   (3 x 1)   (3)

Refer to the topographic map.

3.1.4   Calculate the average gradient between **F** and **G**.

Use the following information:

Vertical interval (VI): 119 m – 80 m = 39 m

$$\text{Formula: Average gradient} = \frac{\text{Vertical interval (VI)}}{\text{Horizontal equivalent (HI)}}$$
(4 x 1)   (4)

3.1.5   Determine if the gradient between (**F** to **G**) is steeper or gentler than (**H** to **I**).   (1 x 1)   (1)

3.2   **MAP INTERPRETATION**

Refer to **J** in block **D4** on the topographic map.

3.2.1   Is the settlement pattern at **J** *dispersed* or *nucleated*?   (1 x 1)   (1)

3.2.2   State ONE site factor that favoured farming in this area.   (1 x 1)   (1)

Refer to residential area **K** in block **E3** on the topographic map and the photograph of the same area below.


[Source: https://www.google.com/search?q=residential=areas=in=verulam]

3.2.3   Area **K** is a (high/low)-income residential area.   (1 x 1)   (1)

3.2.4   Give evidence from the topographic map and/or photograph to support your answer to QUESTION 3.2.3.   (1 x 2)   (2)

3.2.5   How does the spacing of the contour lines indicate that residential area **K** is built on steep/hilly land?   (1 x 1)   (1)

3.2.6   How did the steep/hilly land influence the type of street pattern in this area on the topographic map?   (1 x 2)   (2)

Refer to the orthophoto map.

3.2.7　　Refer to Canelands **(6)** in block **A5** on the orthophoto map and state ONE situation factor that influenced the location of this industrial area. (1 x 1) (1)

Refer to the Hazelmere Dam in block **A1** and an enlarged extract of the topographic map below.
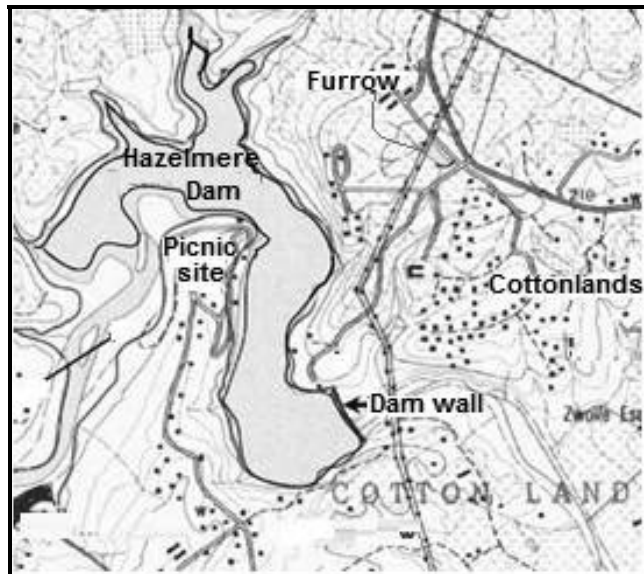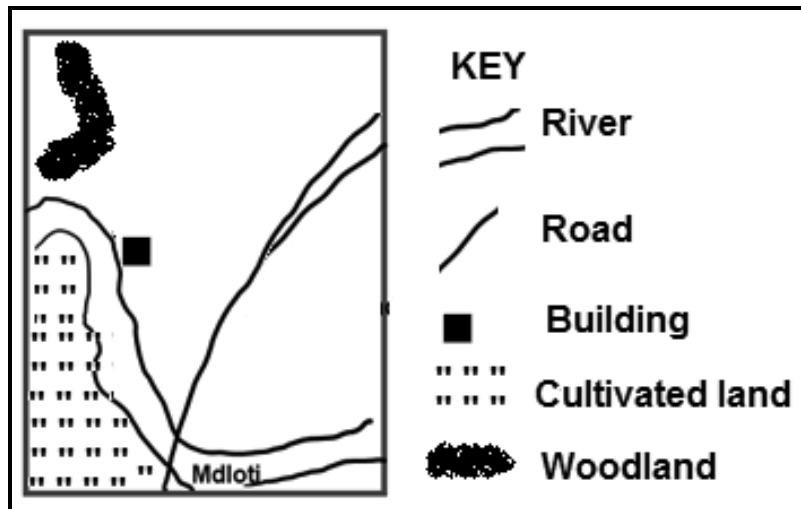

3.2.8　　Name ONE tertiary activity that is associated with the Hazelmere Dam. (1 x 1) (1)

3.2.9　　How does this tertiary activity (answer to QUESTION 3.2.8) contribute to the economy of Verulam? (1 x 2) (2)

3.3   **GEOGRAPHICAL INFORMATION SYSTEMS (GIS)**

Refer to the block below representing block **D5** on the topographic map.

[Source: Examiner's own sketch]

3.3.1   Identify the following:

(a)   Human-made polygon (area) feature

(b)   Natural line feature   (2 x 1)   (2)

3.3.2   The TWO features (answer to QUESTION 3.3.1) represent
(vector/raster) data.   (1 x 1)   (1)

Refer to blocks **A3** and **A4** on the orthophoto map.

3.3.3   Buffering is the demarcation of an area around a feature/location.

(a)   What evidence indicates that buffering is taking place along
the Mdloti River?   (1 x 1)   (1)

(b)   Explain why it was necessary to buffer the Mdloti River.
(1 x 2)   (2)

Refer to blocks **B4** and **B5** on the topographic map.

3.3.4   A data layer is a layer of information based on a specific theme.

(a)   Identify the infrastructure data layer that creates international
links for the Dube TradePort IDZ.   (1 x 1)   (1)

(b)   How did the topography data layer assist in determining the
ideal location of the Dube TradePort IDZ?   (1 x 1)   (1)
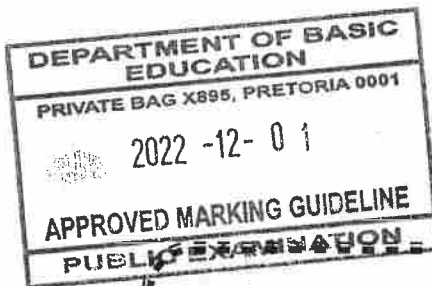
TOTAL SECTION B: **30**
GRAND TOTAL: **150**

basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

GEOGRAPHY P2

NOVEMBER 2022

MARKING GUIDELINES

MARKS: 150

Name	Designation	Signature	Date
Mrs. ZPL SHABALALA	Umalusi External Moderator		01.12.2022
Mr. GD SAMAAI	Umalusi External Moderator		01.12.2022
Ms. T MAGSON	DBE Internal Moderator		01.12.2022
Mr. R DAVECHAND	DBE Internal Moderator		01.12.2022

These marking guidelines consist of 13 pages.

PRINCIPLES FOR MARKING GEOGRAPHY- NSC NOVEMBER 2022 AND SC JUNE 2023

The following marking principles have been developed to standardise marking in all provinces.

MARKING

(M)

- ALL questions MUST be marked, irrespective of whether it is correct or incorrect
- Where the maximum marks have been allocated for a particular question, place an over the remainder of the text to indicate the maximum marks have been achieved.
- A clear, neat tick must be used: ✓
  - If ONE mark is allocated, ONE tick must be used: ✓
  - If TWO marks are allocated, TWO ticks must be used: ✓✓
  - The tick must be placed at the FACT that a mark is being allocated for
  - Ticks must be kept SMALL, as various layers of moderation may take place
- Incorrect answers must be marked with a clear, neat cross: ✗
  - Use MORE than one cross across a paragraph/discussion style questions to indicate that all facts have been considered
  - Do NOT draw a line through an incorrect answer
  - Do NOT underline the incorrect facts

For the following action words, ONE word answers are acceptable: **list**, **name**, **state**, **identify**

For the following action words, a FULL sentence must be written: **describe**, **explain**, **evaluate**, **analyse**, **suggest**, **differentiate**, **distinguish**, **define**, **discuss**, **why**, **how**

The following action words need to be read within its context to determine whether a ONE-word answer or FULL sentence is required: **provide**, **what**, **tabulate** and **give**

NOTE THE FOLLOWING

- If the numbering is incorrect or left out, as long as the sequence of answers to questions is followed candidates can be credited
- Spelling errors if recognisable, award the marks provided the meaning is correct.
- Be sensitive to the sense of an answer, which may be stated in a different way
- In questions where a letter is the accepted response, but the learner writes the actual answer- award marks.
- There will be additional guidelines for the marking of certain questions.

TOTALLING AND TRANSFERRING OF MARKS

- Each sub-question must be totalled
  - Questions in Section A has five sub-sections, therefore five sub-totals per question required. Section B has three sub-sections and three sub-totals.
  - Sub-section totals to be written in the right-hand margin at the end of the sub-section and underlined
  - Sub-totals must be written legibly
  - Leave room to write in moderated marks on different levels
- Total sub-totals and transfer total to top left-hand margin next to question number
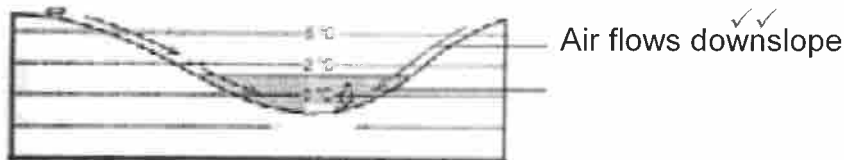- Transfer total to cover of answer book
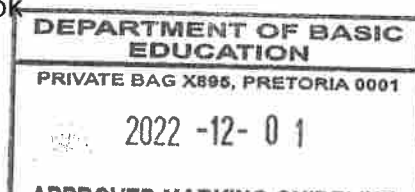
(30) **QUESTION 1**

1.1.1   A (South Atlantic High) (1) ✓
1.1.2   B (Kalahari High) (1) ✓
1.1.3   B (South Indian) (1) ✗   **2**

1.2.1   Melting snow ✓
1.2.2   Mouth ✗
1.2.3   Third order ✓   **2**

1.3.1   Katabatic ✗
1.3.2   **1** occurs during the day while **2** occurs at night   ✓✓

1.3.3   Cold air rolls down into the valley and forms an inversion

— Air flows downslope   **6**

1.4.1   Shape of front concave   ✗
         Steep gradient of front   ✓

1.4.2   Warm air undercuts the cold air   ✗

1.4.3   Air behind the cold front is colder than the air in front. Cold air moves faster than warm
         air ahead of it. Cold front catches up with the warm front.   **7**

1.5.1   (a) A river that only flows all year round   ✗

         (b) The river channel is wide   ✗

         (c) Regularity of rainfall and the soil type over which the streams flow.

1.5.2   Gauteng and the Eastern Cape

1.5.3   The cost of food production will increase at it is costly to buy purified water. Farmers
         will have to buy more chemicals to purify water. Chemicals cost a lot and this will
         increase production costs. It will be costly to purify water for use in electricity
         generation. These costs will be included in electricity prices. Costs will increase the
         price of electricity during production. There will be less clean water to generate hydro-
         electricity.   **13**
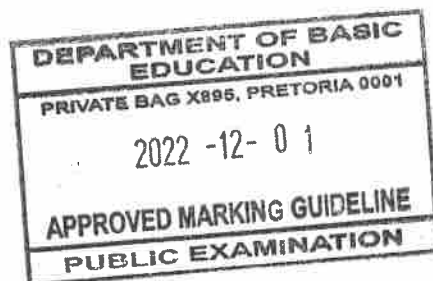
SECTION A

QUESTION 1: RURAL AND URBAN SETTLEMENTS

1.1   1.1.1   A (1)

        1.1.2   B (1)

        1.1.3   A (1)

        1.1.4   D (1)

        1.1.5   B (1)

        1.1.6   C (1)

        1.1.7   A (1)

        1.1.8   D (1)   (8 x 1) (8)

1.2   1.2.1   Y (1)

        1.2.2   Z (1)

        1.2.3   Z (1)

        1.2.4   Y (1)

        1.2.5   Y (1)

        1.2.6   Z (1)

        1.2.7   Y (1)   (7 x 1) (7)

1.3.   1.3.1   Policy to bring about equitable distribution/ access to land/ land
        WHAT IS   ownership (accept examples) (2)
        LAND
        REFORM?   **[CONCEPT]**   (1 x 2) (2)

        1.3.2   Create assets for the poor (1)
        WHAT IS THE   Stabilise relationships (1)
        BENEFIT OF
        WELL-   Promote development (1)
        MANAGED
        REFORM?   **[ANY ONE]**   (1 x 1) (1)
        FROM
        EXTRACT

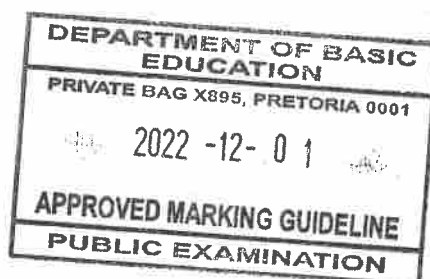1.3.3   **WHY IS LAND RESTITUTION CONSIDERED A CHALLENGE?**   (a) Budgets/funding needs to be accessed (2)
         Legal processes are slow (accept examples) (2)
         Corruption by various parties (2)
         Conflicting views on land ownership (accept examples) (2)
         [ANY ONE]   (1 x 2)   (2)

HOW DOES B ILLUSTRATE THE SUCCESSFUL PROCESS OF LAND RESTITUTION?

     (b) Shaking of hands (2)
         There is no fighting/peaceful agreement (accept examples) (2)
         Well managed/organised environment (accept examples) (2)
         [ANY ONE]   (1 x 2)   (2)

1.3.4   **WHICH FACTORS HAVE CAUSED THE PROCESS OF LAND REFORM TO ADVANCE SLOWLY?**   Willing seller/buyer clause (2)
Legal processes are costly (2)
Disagreements between people involved in the process (2)
Constrained budgets of government (2)
Grey areas in the government policies (2)
Lack of knowledge regarding the land reform process (2)
Poverty/Lack of income to attend meetings (2)
Lack of appropriate documentation (2)
Government unable to provide loans (2)
Government unable to provide equipment (2)
Training of farmers is costly (2)
People choose compensation over land (2)
[ANY TWO/ ACCEPT EXAMPLES]   (2 x 2)   (4)

1.3.5   **EXPLAIN THE SOCIAL BENEFITS OF WELL-MANAGED LAND REFORM FOR PEOPLE IN RURAL AREAS.**   More employment opportunities (2)
Decreased poverty (2)
Brings about stability (accept examples) (2)
Better quality of life (accept examples) (2)
Family units would not be broken (accept examples) (2)
Crime will be reduced (2)
[ANY TWO]   (2 x 2)   (4)

1.4   1.4.1   Tall buildings (1)
         High density of buildings (1)   (2 x 1)   (2)

     1.4.2   CBD (1)
         (Accept A) (1)   (1 x 1)   (1)

     1.4.3   Increases (building density) (2)   (1 x 2)   (2)

1.4.4
WHY IS THE TRANSITION ZONE DILAPIDATED DESPITE HIGH LAND VALUES?

Future expansion of the CBD occurs here(invasion and succession) (2)
Landlords in the transition zone are hesitant to renovate / can still get high prices for dilapidated buildings (2)
People renting are poor and can't maintain the building (2)
Overcrowding of buildings (2)
Illegal occupation of buildings (2)
Social ills are rife (accept examples) (2)
Buildings are left abandoned (2)
Buildings are vandalized (accept examples) (2)
[ANY TWO]   (2 x 2)   (4)

1.4.5
WHY IS THE OBD ATTRACTIVE FOR THE RELOCATION OF BUSINESSES?

Greater accessibility (accept examples) (2)
They are located in high population density areas (markets) (2)
Along main roads will attract more customers (2)
Lower land values (2)
Lower rental costs (2)
Modern buildings/business parks (2)
More parking space (2)
Less pollution (accept examples) (2)
Less crime (2)
More land available for expansion (2)
[ANY THREE]   (3 x 2)   (6)

1.5   **1.5.1**
WHAT IS AN INFORMAL SETTLEMENT?

A settlement that has limited planning/ infrastructure (2)
No formal ownership of the land (2)
Land that is occupied illegally (2)
An informal structure with different building materials (accept examples) (2)
[CONCEPT-ANY ONE]   (1 x 2)   (2)

1.5.2
<u>QUOTE</u> A REASON FOR INCREASE IN NUMBER OF INFORMAL SETTLEMENT

"Rapid urbanisation" (1)
"government failure to deliver adequate housing"(1)
[ANY ONE]   (1 x 1)   (1)

1.5.3
WHY ARE INFORMAL SETTLEMENT IN ETHEKWINI AT RISK OF FLOODING?

Locate near water sources e.g. rivers (2)
In low- lying areas (2)
Lack of basic services (amenities) / infrastructure (accept examples) (2)
Poor drainage/storm water systems (2)
Lack of refuse removal (accept examples) (2)
[ANY ONE]   (1 x 2)   (2)

1.5.4
HOW DOES LACK OF PROPER ROADS IMPACT ON EMERGENCY SERVICES TO REACH INFORMAL SETTLEMENTS

Takes longer to reach the informal settlement in times of emergency (accept examples) (2)
Poor accessibility to informal settlements (accept examples) (2)
[ANY ONE]   (1 x 2)   (2)
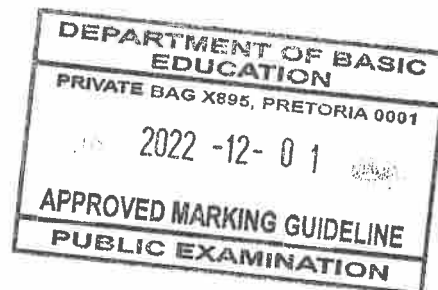
1.5.5
PARAGRAPH SUGGEST MEASURES TO PREVENT FLOOD-RELATED DISASTERS IN INFORMAL SETTLEMENTS

Informal settlements should be relocated to higher lying areas (accept examples) (2)

Adequate services should be provided to informal settlements (accept examples) (2)

An efficient drainage system should be installed (accept examples) (2)

Provide stronger building material (accept examples) (2)

Provide better infrastructure (accept examples) (2)

Access to better emergency services (accept examples) (2)

Buffering the area around the river (accept examples) (2)

Planting of vegetation/trees (2)

Awareness/ education on the dangers of flooding (2)

Early warnings / updated weather reports (2)

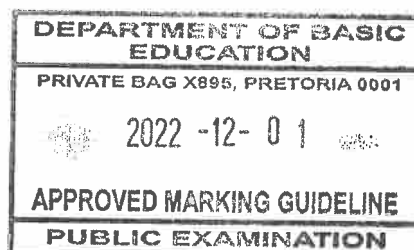Compile legislation/ laws restricting people near flood areas (2)

Sand-bagging/artificial levees in low-lying areas (2)

Provide low cost housing (2)

[ANY FOUR]   (4 x 2)

(8)

[60]

QUESTION 2: ECONOMIC GEOGRAPHY OF SOUTH AFRICA

2.1   2.1.1   A (1)

        2.1.2   B (1)

        2.1.3   D (1)

        2.1.4   A (1)

        2.1.5   B (1)

        2.1.6   D (1)

        2.1.7   C (1)

        2.1.8   B (1)   (8 x 1)   (8)

2.2   2.2.1   Market orientated industries (1)

        2.2.2   Bridge industries (1)

        2.2.3   Heavy industries (1)

        2.2.4   Footloose industries (1)

        2.2.5   Light industries (1)

        2.2.6   Raw-material orientated industries (1)

        2.2.7   Ubiquitous industries (1)   (7 x 1)   (7)

2.3.   2.3.1   When **nutritious food** (enough/ reliable/ healthy/ quality food) ($\sqrt{}$) is
        DEFINE   **accessible** ($\sqrt{}$) (to the people of a country) (2)
        FOOD
        SECURITY **[CONCEPT- PART MARKING]**   (1 x 2)   (2)

        2.3.2   23,6 (%) (1)   (1 x 1)   (1)

        2.3.3   To make a comparison of food security across countries (2)
        FOOD   Working on improving its measurements of food security (2)
        INSECURITY
        EXPERIENCE **[ANY ONE]**   (1 x 2)   (2)
        SCALE

        2.3.4   People were unable to work (accept examples) (2)
        SUGGEST   People had no money to purchase food (2)
        HOW
        HEALTH   Countries could not import food (2)
        PANDEMICS,
        LIKE COVID, Lack of accessibility to food (accept examples) (2)
        LED   TO
        FOOD   Loss of economically active people (breadwinner) (2)
        INSECURITY **[ANY ONE]**   (1 x 2)   (2)
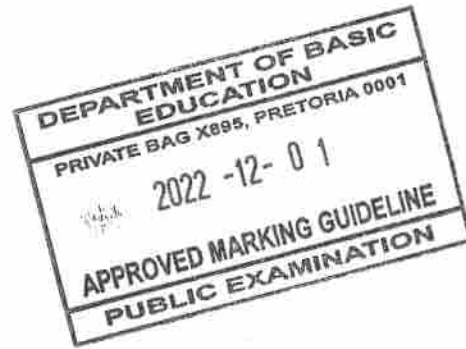
2.3.5

PARAGRAPH
EXPLAIN
HOW
SA GOV CAN
ASSIST
FARMERS IN
ACHIEVING
ZERO
HUNGER

Provide incentives (√) to increase productivity on farms (accept examples) (2)

Technical support (√) for farmers will increase production (accept examples) (2)

Provide infrastructure (accept examples) (√) to increase production/distribution (2)

Providing modernised farming equipment (√) will increase production (accept examples) (2)

Encourage subsistence farmers to embrace commercial farming (√) to increase production (accept examples) (2)

Research into a variety of farming practices (√) will optimize production (accept examples) (2)

Provision of genetically modified(GM) crops (√) will guarantee production (accept examples) (2)

Programmes to upskill farmers (√) to increase production (accept examples) (2)

Access to pesticides/insecticides /fertilisers (√) to improve/ ensure the quality of crops (accept examples) (2)

Assist with safety and security (√) of farmers will encourage farming (2)

More efficient food storage facilities (√) to increase the lifespan (2)

Land reform programmes should be prioritized (√) to give more people access to farming land (2)

[ANY FOUR- PART MARK – 4 x 1 MARK]   (4 x 2)   (8)

2.4   **2.4.1**   Decreased/ negative (1)
1000-101 (tons) (1)
[ANY ONE]   (1 x 1)   (1)

     2.4.2   101 (1)   (1 x 1)   (1)

     2.4.3   China (1)   (1 x 1)   (1)

     2.4.4

STATE TWO
PHYSICAL
FACTORS
THAT
FAVOURED
SA AS THE
LEADING
GOLD
PRODUCER
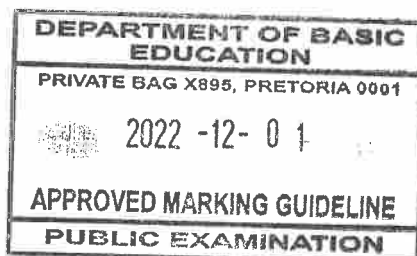1970

(Witwatersrand has the) largest gold reef deposit (2)
Gold deposits are closer to the surface (2)
Lower geothermal gradient (2)
Gold reserves are of a higher quality (2)
More stable geological rock (2)
[ANY TWO]   (2 x 2)   (4)

2.4.5
SUGGEST TWO FACTORS THAT RESULTED IN A REDUCTION OF GOLD PRODUCTION 1990-2020

Labour disputes (accept examples) (2)
Decreased foreign investment in the mines (2)
Certain mines have had to close down permanently (2)
High numbers of unskilled miners (2)
Threat of nationalisation (accept examples) (2)
Power outages (load shedding) (2)
Illness of workers (accept examples) (2)
High operational costs (accept examples) (2)
Unreliable water sources (2)
Illegal mining (accept examples) (2)
Fluctuation in the gold prices (2)
Fluctuation in the exchange rate (2)
Mine disasters (accept examples) (2)
Non-renewable resource (2)
Increased depth at which mineral ore is found (2)
[ANY TWO]   (2 x 2)   (4)

2.4.6
EXPLAIN HOW A REDUCTION IN SA'S GOLD PRODUCTION WILL IMPACT NEGATIVELY ON ECO GROWTH

A decrease in the GDP ($\sqrt{}$) as there will be a decrease in all economic sectors (2)
Reduced buying power ($\sqrt{}$) due to an increase in unemployment (2)
Business profits will decrease ($\sqrt{}$) due to the reduced market (2)
Less taxes paid to government ($\sqrt{}$)will reduce budgets for the development of infrastructure (2)
Decrease in the multiplier effect ($\sqrt{}$) in the country resulting in all sectors of the economy being affected (2)
Decrease in foreign income ($\sqrt{}$)due to less gold exports causes economic recession (2)
Increase in unemployment ($\sqrt{}$) due to closure of mines (2)
Decrease in manufacturing ($\sqrt{}$) due to less raw materials (2)
[ANY TWO- PART MARKING- 2 x 1 MARKS]   (2 x 2)   (4)
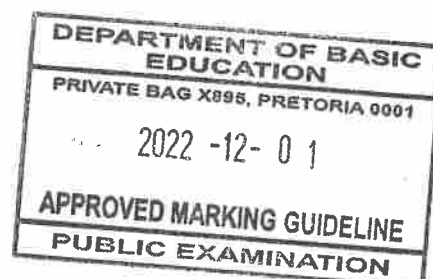
2.5 2.5.1 It is an industrial zone built to encourage **foreign investment** and
      WHAT IS AN   promote **export-oriented** products (2)
      INDUSTRIAL
      DEV ZONE?   It is a **purposely built** industrial zone close to **transport routes** with
                    international links (harbour, road, international airport) (2)
                    [CONCEPT- ANY ONE]   (1 x 2)   (2)

     2.5.2   It is the largest Greenfield airport development (1)
      WHAT   **[REFER TO FACT FILE]**   (1 x 1)   (1)
      TRANSPORT
      INFRASTRUCT
      URE   MAKE
      DUBE
      TRADEPORT
      UNIQUE

     2.5.3   Harbour (1)
      STATE TWO   N2 (National route)/ N3 (1)
      FACTORS
      ON MAP –   King Shaka Airport (International) (1)
      GREATEST   **[ANY TWO- REFER TO THE MAP]**   (2 x 1)   (2)
      ACCESSIBILI
      TY TO TRADE
      PORT

     2.5.4   Access to improved telecommunication services (accept examples) (2)
      DESCRIBE TWO   Available infrastructure (accept examples) (2)
      ADVANTAGES
      REGARDING   Airport provides industries with access to local and international markets
      INFRASTRUTUR   (accept examples) (2)
      E THAT DUBE
      TRADE PORT   Access to power supply (accept examples) (2)
      CAN OFFER TO   Dams ensure an abundance of water (2)
      ATTRACT
      INDUSTRIES   Storage facilities (hubs) at airport (accept examples) (2)
                    [ANY TWO]   (2 x 2)   (4)

     2.5.5   Provision of a variety of skills (√) due to exposure to different industries
      EXPLAIN   (2)
      HOW   THE
      DUBE   Transfer of skills to the local labour force(√) by technical specialists from
      TRADEPORT   other countries (2)
      IDZ WOULD
      UPSKILL   Fourth industrial revolution skills (√) would create new/ more job
      LABOUR IN   opportunities in the province (2)
      THE
      PROVINCE   A permanent /stable labour force (√) due the newly acquired skills (2)
                    3500 learners were skilled (benefitted) (√) from the CSI programme (2)
                    [ANY THREE- PART MARKING-3 x 1 MARK]   (3 x 2)   (6)
                                                                              [60]

                                                        TOTAL SECTION A: 120
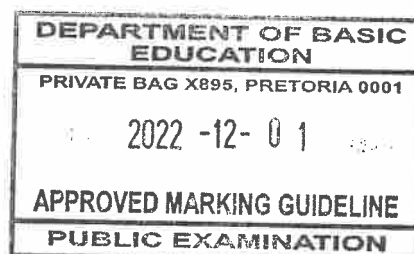
SECTION B

QUESTION 3

3.1   **MAP SKILLS AND CALCULATIONS**

     3.1.1   5m (1)   (1 x 1)   (1)

     3.1.2   D (1)   (1 x 1)   (1)

     3.1.3   (a) 29 (1)°
              (b) 04 (1)'   47 (45 – 49)" (1)   (3 x 1)   (3)

     3.1.4   Formula: Gradient = $\dfrac{\text{Vertical Interval (VI)}}{\text{Horizontal Equivalent (HE)}}$
     AVERAGE
     GRADIENT

              HE = 4,5 (1) cm x 500 m = 2250 (1) m
                    (range: 4,4-4,6 cm x 500 = 2200- 2300)

                 = $\dfrac{39}{2250}$ (1) (for correct substitution)

               = 1 : 57,69 (1) (range: 1:56,41 – 1: 58,97)   (4 x 1)   (4)

     3.1.5   More gentle/ gentler (1)   (1 x 1)   (1)

3.2   **MAP INTERPRETATION**

   3.2.1   Dispersed (1)   (1 x 1)   (1)

     3.2.2   Next to the river/ water supply (1)
     ONE   SITE   Flat land (1)
     FACTOR
     THAT   Fertile soil (1)
     FAVOURED
     FARMING   **[ANY ONE]**   (1 x 1)   (1)

     3.2.3   Low (income) (1)   (1 x 1)   (1)

     3.2.4   Small plots/houses (2)
     GIVE   Low cost housing/RDP housing project (2)
     EVIDENCE
     FROM TOPO Houses of similar design (2)
     MAP/PHOTO
     TO   High density (2)
     SUPPORT   Evidence of backyard shacks (2)
     YOUR
     ANSWER   **[ANY ONE]**   (1 x 2)   (2)

     3.2.5   Contour lines are close together (1)   (1 x 1)   (1)
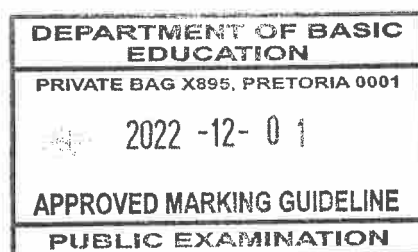
     3.2.6   It resulted in an **irregular** street pattern (2)   (1 x 2)   (2)
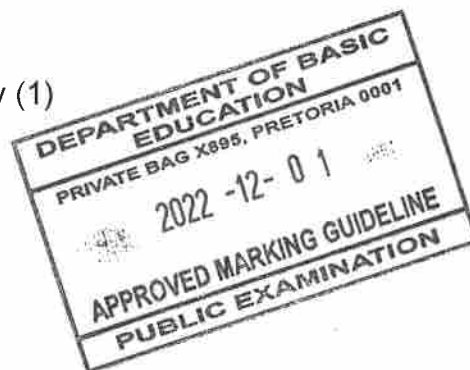
3.2.7 Access to transport networks (accept examples) (1)
STATE ONE   Available labour (1)
SITUATION
FACTOR   Easy access to markets (1)
FAVOURED
INDUSTRIAL   **[ANY ONE]**   (1 x 1)   (1)
SECTOR IN
BLOCK A5

3.2.8 Provision of water (1)
ONE   Tourism/recreational activities (accept examples) (1)
TERTIARY ACT
ASSOCIA WITH   **[ANY ONE]**   (1 x 1)   (1)
HAZLMERE
DAM

3.2.9 **Provision of water**
HOW DOES   Water will promote industrial development (2)
THIS
TERTIARY   Water will encourage agriculture (2)
ACTIVITY
CONTRIBUT
E TO THE   **Tourism/Recreation**
ECONOMY
OF   Recreational activities will attract locals and tourists (2)
VERULAM ?   Multiplier effect (2)
               Creating jobs opportunities (2)
               [ANY ONE- MUST LINK TO ANSWER IN QUESTION 3.2.8]   (1 x 2)   (2)

3.3   **GEOGRAPHICAL INFORMATION SYSTEMS (GIS)**

3.3.1 (a) Cultivated land (1)
HUMAN-
MADE
POLYGON   (b) River (1)
NATURAL
LINE FEATR   (2 x 1)   (2)

3.3.2 Vector (1)   (1 x 1)   (1)

3.3.3 (a) Trees on the banks of the river (1)
EVIDENCE   Vacant land between the river and the industries/cultivated land (1)
OF
BUFFERING   Buildings are far away from the river (1)
                   [ANY ONE]   (1 x 1)   (1)

EXPLAIN
WHY IT WAS   (b) Prevents the river from being polluted from the industries (2)
NECESSAR
TO BUFFER   To limit pollutants (accept examples) from the cultivated lands
THE MDLOTI
RIVER?   entering the river (2)
                    To reduce the effects of flooding (2)
                    [ANY ONE]   (1 x 2)   (2)

3.3.4 (a) (King Shaka International) Airport (1)
           (Accept Transport) (1)   (1 x 1)   (1)

       (b) The gradient/land is gentle/flat (1)   (1 x 1)   (1)

TOTAL SECTION B: 30
GRAND TOTAL: 150