KWAZULU-NATAL PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

GEOGRAPHY P2

PREPARATORY EXAMINATION

SEPTEMBER 2023

MARKS: 150

TIME: 3 hours

Stanmorephysics

This question paper consists of 15 pages.

SECTION A: RURAL AND URBAN SETTLEMENTS AND 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 A.

1.1.1 A settlement is classified as rural as a result of the number of …

A. low-order services.
B. people living in the settlement.
C. high-order services.
D. functions of the settlement.

1.1.2 The exact land on which a settlement is built is the …

A. site.
B. place.
C. situation.
D. area.

1.1.3 The position of a settlement in relation to the surrounding area is its …

A. site.
B. location.
C. situation.
D. area.

1.1.4 A physical factor which influences the location of a site is …

A. transport.
B. water.
C. religion.
D. tradition.

1.1.5 A loose grouping of a few farmsteads is called a …

A. town.
B. village.
C. metropolis.
D. hamlet.

1.1.6 Wet-point settlements occur near …

A. hills.
B. spurs.
C. lake.
D. mountains.

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1.1.7 A ... settlement is found in a gap between hills.

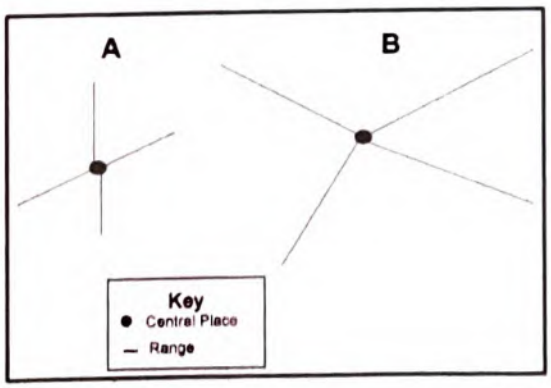
A. gateway
B. bridge
C. crossroads
D. recreational

1.1.8 A ... settlement pattern is where farmsteads are placed far apart from each other.

A. nucleated
B. linear
C. dispersed
D. circular

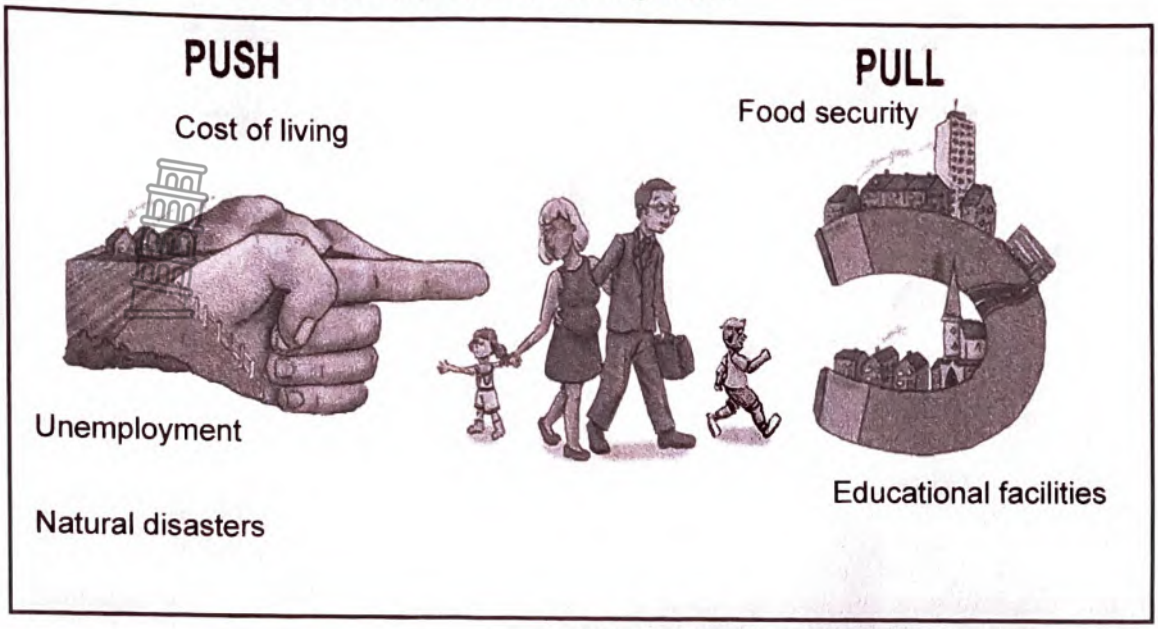
(8 x 1) (8)

1.2 Choose the term/concept from COLUMN B that matches 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 Z.

	COLUMN A	COLUMN B
1.2.1	These goods are used daily and are found in most types of settlements	Y. low order Z. high order
1.2.2	The area from which a business draws its customers	Y. threshold population Z. sphere of influence
1.2.3	The maximum distance a customer is willing to travel to buy goods or to use a service	Y. accessibility Z. range
1.2.4	An urban service centre supplying goods and services to the surrounding rural areas	Y. market area Z. central place
1.2.5	The ranking of urban areas according to size and function	Y. urban hierarchy Z. urban morphology
1.2.6	There are (more/fewer) smaller central places than larger central places	Y. more Z. fewer
1.2.7	Which one of the central places (**A** or **B**) below has more regional shopping centres? 	Y. A Z. B

(7 x 1) (7)

1.3 Refer to the sketch below on rural – urban migration.



https://bscholarly.com/rural-urban-migration

1.3.1 What is the difference between a Push factor and a Pull factor in rural-urban migration? (1 x 1) (1)

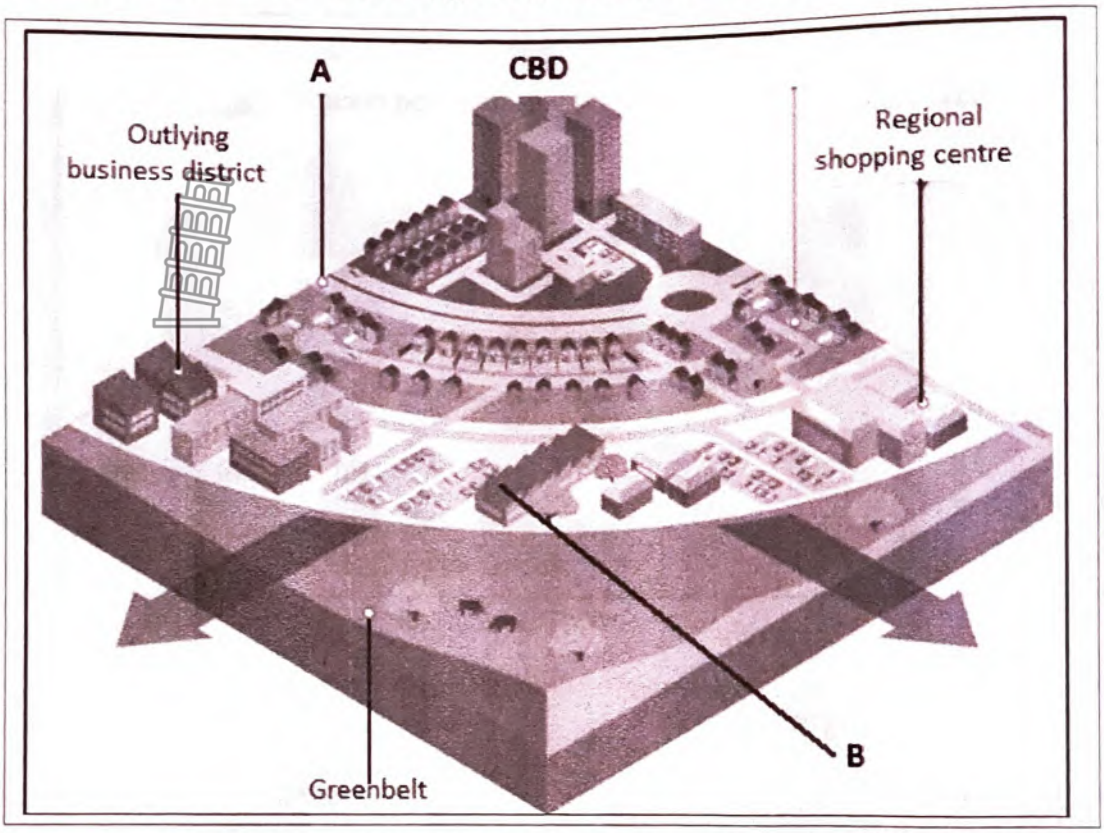
1.3.2 How could the finger pointing serve as a warning to the people leaving the rural areas? (1 x 2) (2)

1.3.3 Explain TWO socio-economic push factors (evident in the sketch) resulting in rural-urban migration. (2 x 2) (4)

1.3.4 Discuss TWO negative impacts of rural-urban migration on rural communities. (2 x 2) (4)

1.3.5 Suggest TWO sustainable measures that can be implemented in rural areas to reduce rural urban migration. (2 x 2) (4)

1.4 Refer to the sketch below showing modern urban land-use zones and land-use.



https://www.google.com/search?q=urban+profile&client=firefox-b-d&source

1.4.1 Name the land-use zone labelled **A** that surrounds the CBD. (1 x 1) (1)

1.4.2 Name TWO areas in the sketch where businesses in the CBD are relocating to. (2 x 1) (2)

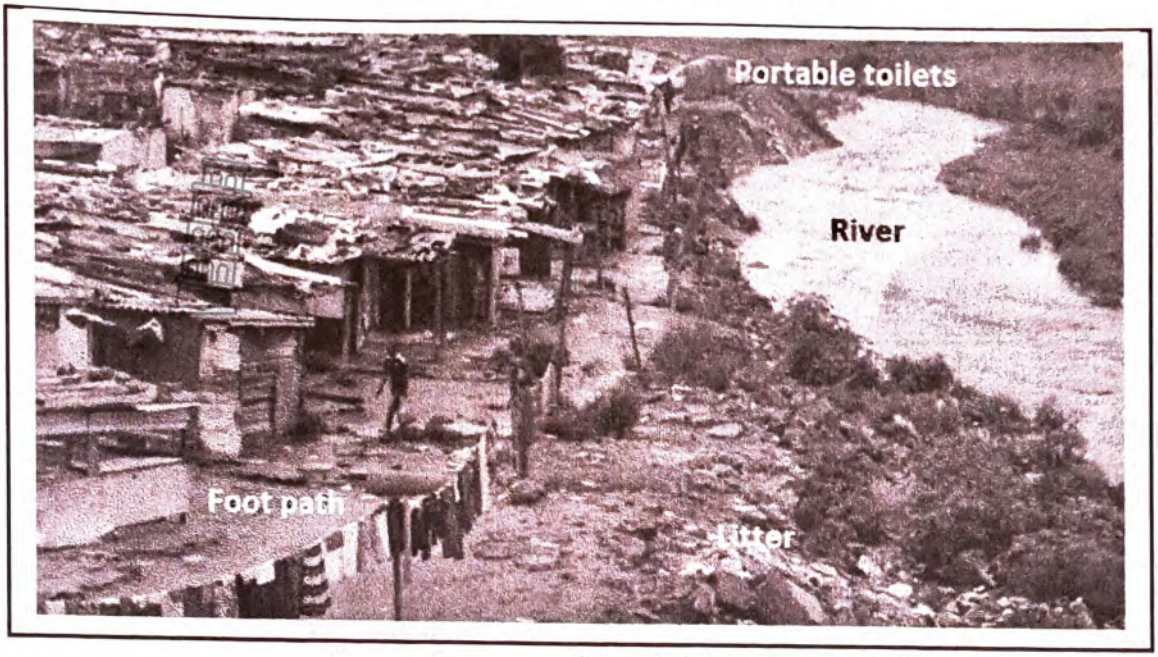
1.4.3 Explain why the CBD is no longer attractive as a location for many businesses. (2 x 2) (4)

1.4.4 **B** is a heavy industry located in the rural-urban fringe. Discuss TWO factors that would have attracted a heavy Industry such as **B** to locate in this land-use zone. (2 x 2) (4)

1.4.5 Suggest TWO reasons why urban planners allocate space for green belts within a city. (2 x 2) (4)

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1.5 Refer to the photograph below showing an informal settlement.



https://www.researchgate.net/figure/Quarry-Road

1.5.1 Identify ONE characteristic of an informal settlement visible in the photograph. (1 x 1) (1)

1.5.2 Why do informal settlements like the one depicted in the photograph develop? (1 x 2) (2)

1.5.3 With reference to the photograph, discuss TWO challenges experienced by people living in this settlement. (2 x 2) (4)

1.5.4 In a paragraph of approximately EIGHT lines, suggest sustainable strategies that the local municipality could implement to improve the conditions of the people living in Informal settlements. (4 x 2) (8)

[60]

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QUESTION 2: ECONOMIC GEOGRAPHY OF SOUTH AFRICA

2.1 Choose the concept from COLUMN A that matches the statement in COLUMN B. Write only **Y** or **Z** next to the question numbers (2.1.1 to 2.1.8 in the ANSWER BOOK. E.g.1.2.9 **Z**.

COLUMN A	COLUMN B
2.1.1 The total value of goods and services produced in a country by the permanent inhabitants in one year.	Y. gross domestic product Z. gross national product
2.1.2 Production of crops for local and overseas markets to make a profit.	Y. large-scale farming Z. small-scale farming
2.1.3 Government programmes to encourage investment and job creation in untapped (not yet exploited) areas with high growth potential.	Y. spatial development initiative Z. industrial development zone
2.1.4 Concerned with the collection, analysis and transmission of information.	Y. quaternary sector Z. tertiary sector
2.1.5 The purchase and sale of goods and services by companies in different countries.	Y. local trade Z. international trade
2.1.6 The value of imports is greater than the value of exports.	Y. negative balance of trade Z. positive balance of trade
2.1.7 Over concentration of industries in a few core areas.	Y. industrial decentralization Z. industrial centralization
2.1.8 Refers to products sold within the country.	Y. domestic market Z. export market

(8 x 1) (8)

2.2 Choose a term/concept from the list below that matches the descriptions that follow. Write only the term/concept next to the question numbers (2.2.1 to 2.2.7) in the ANSWER BOOK, e.g. 2.2.8 Border industries.

Industrial Decentralization, Market orientated industries, Bridge industries, industrial centralization, light industries, Ubiquitous industries, Footloose industries, Raw- material orientated industries

2.2.1 Industries that can be located in any place without being affected by factors such as resources or transport.

2.2.2 Industries that provide services that are available 24 hours 7 days a week from any geographic location.

2.2.3 These industries need to be closer to their customers.

2.2.4 Industries using heavy, bulky or perishable raw materials are ...

2.2.5 Industries located close to the CBD.

2.2.6 These industries are located between the raw material source and the market.

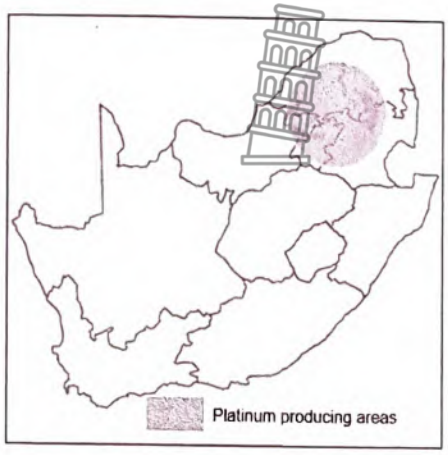
2.2.7 Industries that are concentrated in the core areas.

(7 x 1) (7)

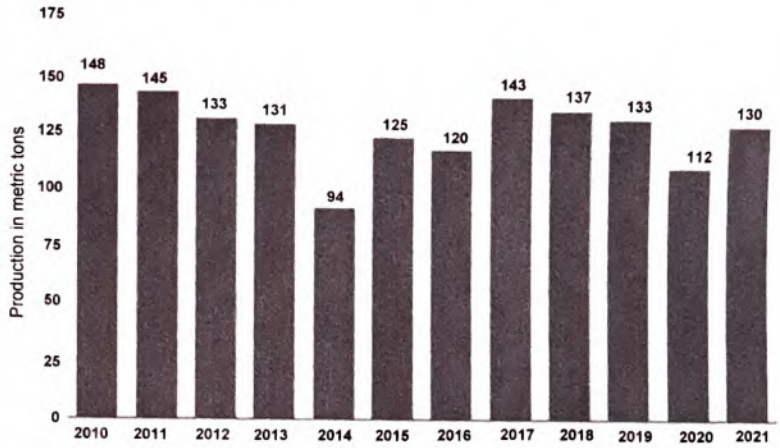
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2.3 Refer to the infographic below on platinum production in South Africa.

MAP SHOWING PLATINUM PRODUCING AREAS IN SOUTH AFRICA



PRODUCTION VOLUME OF PLATINUM IN SOUTH AFRICA FROM 2010 TO 2021 (in metric tons)



South Africa is the largest producer of platinum in the world, accounting for 80% of the world's supply. Platinum is used in many industrial applications including in computer hard disks, mobile phones and glass, among others. In medical applications Platinum is used in the manufacture of anti-cancer drugs, cardiac treatment, implants, and dental applications. The durability, quality, and aesthetic appeal of platinum has contributed to jewellery manufacture. The platinum mining sector could add as much value to investment, exports and gross domestic product. In 2021, the sector, exported about 89% of the metals produced, earned about R96-billion in revenue, paid employees R48-billion in earnings and contributed R900-million in royalties. South African National Platinum Strategy, plans to create more than one-million jobs and a contribution of R8.2-trillion to South Africa's economy by 2050.

Source: Adapted from www.statista.com/statistics/1015227/platinum-production-south-africa

2.3.1 What contribution does South Africa make to the global output of platinum? (1 x 1) (1)

2.3.2 Name TWO platinum producing provinces in South Africa. (2 x 1) (2)

2.3.3 Calculate the difference in platinum production between 2010 and 2021. (1 x 2) (2)

2.3.4 There has been a significant fluctuation (variation) in platinum production from 2010 to 2021. Suggest ONE social factor that could have contributed to this trend. (1 x 2) (2)

2.3.5 In a paragraph of approximately EIGHT lines, discuss how the platinum mining industry contributes to the economic development of South Africa. (4 x 2) (8)

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2.4 Refer to the photograph and extract on the Coega Industrial Development Zone (IDZ).

Coega IDZ: The Largest IDZ in the continent of Africa



The Coega Industrial Development Zone (IDZ) is located in the Nelson Mandela Bay Metropolitan Municipality on the East-West trade route. The Coega IDZ supports public-sector investment to attract foreign and domestic direct investment in the manufacturing sector, with an export orientation. The IDZ has attracted investment in the agro-processing, automotive, aquaculture, electricity generation, metals logistics and business process services sectors. This has advanced socio-economic development in the province through skills development, technology transfer and job creation. The Integrated Transportation Study has confirmed a figure of about 240 000 employment opportunities within the IDZ itself. Transport and infrastructure will be constructed to serve development. The gas-fired Power Project by the Coega Development Corporation in the Coega IDZ has commenced on February 2022 and is expected to be completed in 2027. The Coega IDZ is favorably situated and has adequate land available for expansion, adequate electricity and water supplies and well-established links to the surrounding area. Coega is also nationally and internationally favorably located, providing a gateway between South Africa and the world economy.

Source: Adapted from https://mg.co.za/article/2022-07-26-00-south

2.4.1 In which province is the Coega IDZ situated? (1 x 1) (1)

2.4.2 Give an example of an investment project mentioned in the extract that will be part of the following economic sectors:

(a) primary
(b) secondary (2 x 1) (2)

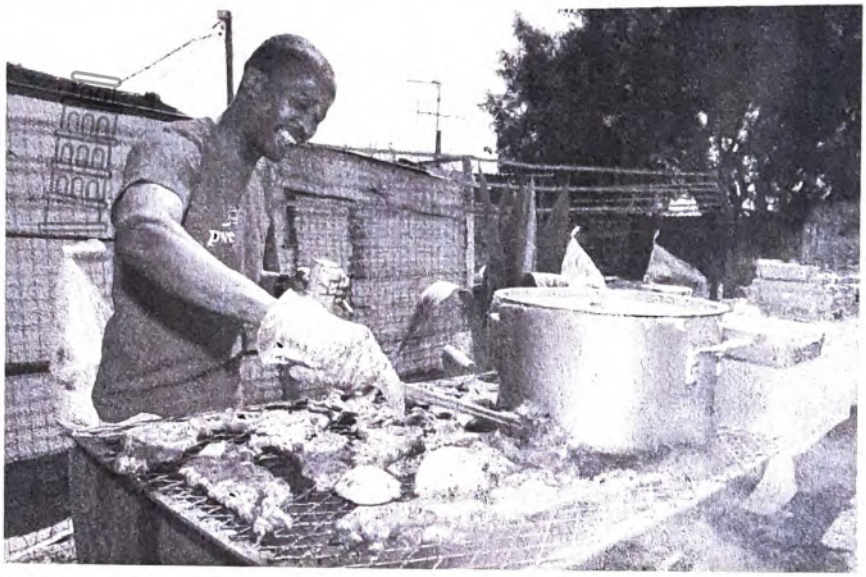
2.4.3 How will public sector investments in the Coega IDZ benefit the local people? (2 x 2) (4)

2.4.4 With reference to the photograph, explain why this area is a very suitable location for the development of the Coega IDZ. (2 x 2) (4)

2.4.5 What positive impact will the Gas fired Power Project have on both the economy and environment of the Nelson Mandela Bay Metropolitan Municipality? (2 x 2) (4)

2.5 Refer to the extract below on the informal sector

SHISANYAMA BUSINESS AS A LIVELIHOOD IN THE INFORMAL SECTOR



A *shisanyama** business is a uniquely South African concept. Shisanyama is so much more than just a type of food service, it's a cultural experience. The idea is to buy meat from a township butchery, braai, meet and make friends in an informal setting. This is why Shisanyama places have become increasingly popular tourist destinations. They are also popular places for people living outside of townships to visit. Because of this rising popularity, many Shisanyama businesses are now spreading outside of townships.

With the demand for unique food experiences, this industry is presenting many new trends and opportunities. Shisanyama offers a profitable market opportunity. Almost 70% of people who start an informal business do so because they are unemployed and have no alternative source of income. The South African government recognises the informal sector as being an important form of employment and a major income generator in poorer communities.

*shisanyama**: is a Zulu slang expression for 'buy and braai'

Source: Adapted from https://www.food24.com/what-is-a-shisa-nyama-exactly

2.5.1 Identify the example of the informal sector in the extract. (1 x 1) (1)

2.5.2 According the extract, state the main reason for the rapid growth of informal businesses in South Africa. (1 x 2) (2)

2.5.3 Explain TWO positive socio-economic impacts that the Shisanyama business has on the local people of the township. (2 x 2) (4)

2.5.4 Discuss TWO challenges facing many South Africans who are part of the informal economy. (2 x 2) (4)

2.5.5 Suggest TWO ways in which the South African government can assist informal traders like the Shisanyama business to earn a fair living, while making a meaningful contribution to the economy of the country. (2 x 2) (4)

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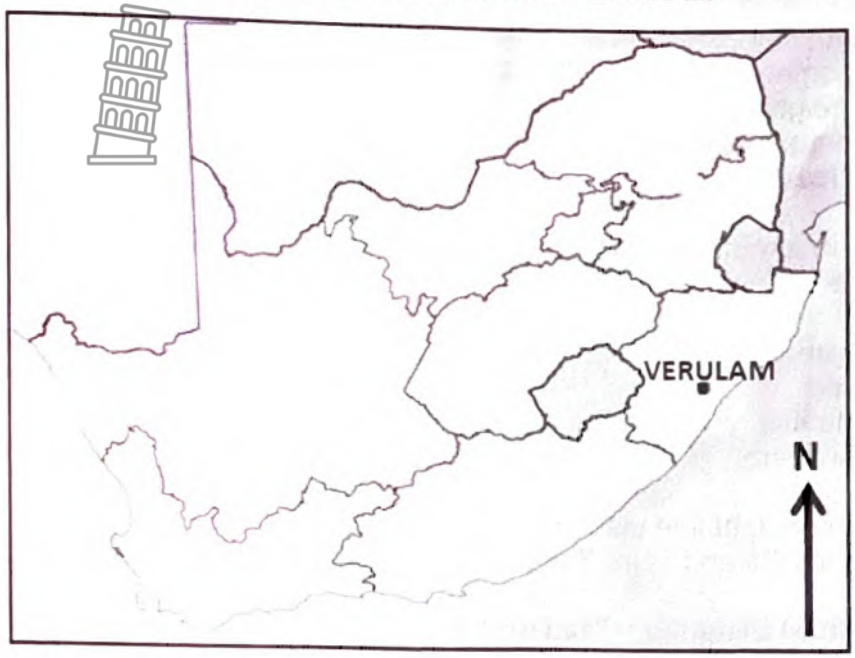
TOTAL SECTION A: 120

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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?g=map+of+verulam]

The following English terms and their Afrikaans translations are shown on the topographical map.

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

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3.1 MAP SKILLS AND CALCULATIONS

3.1.1 The difference in altitude (height) between **I** in block **A2** and **H** in block **B2** on the topographical map is ... metres. (1 x 1) (1)

3.1.2 The feature located at 29°37'44"S; 31°04'15"E is a/the ...

A trigonometrical station 70.
B spot height 114.
C non-perennial river.
D main road. (1 x 1) (1)

3.1.3. If you travel in a north-easterly direction on the 102 road you will reach the town of ...

A Verulam.
B Tongaat.
C Hazelmere.
D Windermere. (1 x 1) (1)

3.1.4 Calculate the straight line distance, in kilometres (kms), between point **G** in block **B5** and point **F** in block **C5** on the topographical map.

Formula: **Actual distance = Map distance x Map Scale**. (2 x 1) (2)

3.1.5 Refer to the orthophoto map.

Calculate the average gradient between spot height 98 in block **C4** and spot height.68 in block **C5**.

Formula: **Average gradient = $\frac{\text{Vertical Interval (VI)}}{\text{Horizontal Equivalent (HI)}}$** (5 x 1) (5)

3.2 MAP INTERPRETATION

3.2.1 Refer to Mount Moreland in block **D4** on the topographical map.

(a) Is the settlement pattern at Mount Moreland dispersed or nucleated? (1 x 1) (1)

(b) State ONE site factor that favoured the location of this settlement. (1 x 1) (1)

3.2.2 Refer to the residential area Riyadh in block **D2** on the topographical map.

(a) Identify the street pattern found in this area. (1 x 1) (1)

(b) Give ONE advantage for this street pattern (answer to QUESTION 3.2.4 (a)) to the residents of Riyadh. (1 x 2) (2)

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3.2.3 Refer to the MISSIONLANDS industrial park in block **D4** on the orthophoto map.

(a) This industrial park is classified as a (heavy/light) industrial area. (1 x 1) (1)

(b) Identify TWO pieces of evidence from the orthophoto map to support your answer, to QUESTION 3.2.3(a) (2 x 1) (2)

(c) Give ONE reason for the location of MISSIONLANDS industrial park in block **D4**. (1 x 2) (2)

3.2.4 Explain how the location of the King Shaka International Airport impacts negatively on the people living in the surrounding area. (1 x 2) (2)

3.3 GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

3.3.1 The natural vegetation north-east of the Hazelmere dam on the topographical map acts as a natural buffer.

(a) Define the term *buffering.* (1 x 2) (2)

(b) Explain how the natural vegetation has played a role in buffering the Hazelmere dam. (1 x 2) (2)

3.3.2 Refer to block **A1** on the topographical map. Vector data refers to real life images in the form of points, lines, and polygons. Identify the following examples of vector data in block **A1:**

(a) A line feature that creates accessibility. (1 x 1) (1)

(b) A polygon feature related to farming. (1 x 1) (1)

3.3.3 Explain how the polygon feature mentioned in QUESTION 3.3.2 (b) favours farming activities in the area. (1 x 2) (2)

TOTAL SECTION B: 30
GRAND TOTAL: 150