basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

GEOGRAPHY P2

NOVEMBER 2023

MARKS: 150

TIME: 3 hours

This question paper consists of 18 pages.

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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. 1020 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 topographical map 3325DC & DD & 3425BA GQEBERHA (PORT ELIZABETH) and a 1 : 10 000 orthophoto map 3325 DC 23 GQEBERHA (PORT ELIZABETH) are provided.

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

16. Show ALL calculations. Marks will be allocated for steps in calculations.

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

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

QUESTION 1: RURAL AND URBAN SETTLEMENTS

1.1 Choose a term/concept from COLUMN B that matches the statement in COLUMN A. Write only the letter (**Y** or **Z**) next to the question numbers (1.1.1 to 1.1.7) in the ANSWER BOOK, e.g. 1.1.8 Y.

COLUMN A		COLUMN B	
1.1.1	The function of a rural settlement	**Y** **Z**	multifunctional unifunctional
1.1.2	The site of a settlement	**Y** **Z**	the exact land occupied by a settlement the location of a settlement in relation to its surroundings
1.1.3	Purpose of land reform in South Africa	**Y** **Z**	increases access to water decreases poverty
1.1.4	Ensures communal land rights of farm workers	**Y** **Z**	land tenure land redistribution
1.1.5	Government allocates land to previously disadvantaged people	**Y** **Z**	land restitution land redistribution
1.1.6	Challenge associated with land reform	**Y** **Z**	willing buyer/seller clause more commercial farmers
1.1.7	The result of well-managed land reform	**Y** **Z**	equal access to land unequal access to land

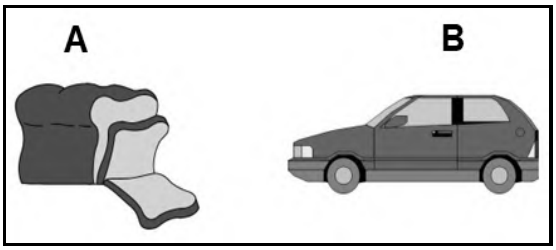
(7 x 1) (7)

1.2 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 (1.2.1 to 1.2.8) in the ANSWER BOOK, e.g. 1.2.9 D.

1.2.1 A central place town …

A offers high-order goods and services.
B offers only rural functions.
C services the surrounding rural area.
D services only the urban area.

1.2.2 **A** is classified as a low-order good compared to **B** because **A** …



[Source: https://www.google.com/low/high-order goods]

A is a luxury item and not needed daily.
B has a lower price and is consumed regularly.
C is non-perishable and not consumable.
D has a higher price and is purchased less often.

1.2.3 Range refers to the … to buy a product.

A minimum distance travelled
B minimum customers required
C maximum distance travelled
D maximum customers required

1.2.4 The range of a high-order good is …

A small due to its daily use.
B large due to its daily use.
C small due to its high cost.
D large due to its high cost.

1.2.5 … refers to the minimum number of customers needed to make a business profitable.

A Central place
B Threshold population
C Range of goods
D Sphere of influence

1.2.6 The threshold population of a grocery store is …

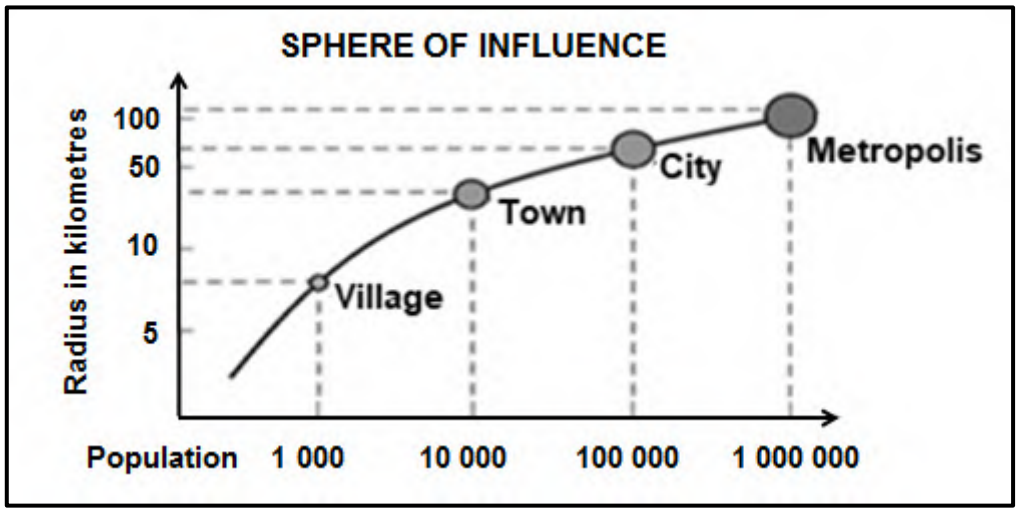
A low because it has more high-order goods.
B high because it has more low-order goods.
C high because it has more high-order goods.
D low because it has more low-order goods.

1.2.7 The area from which a settlement draws its customers is its …

A threshold population.
B sphere of influence.
C service area.
D maximum range.

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1.2.8 The sphere of influence of a city is greater than a village because it has a …



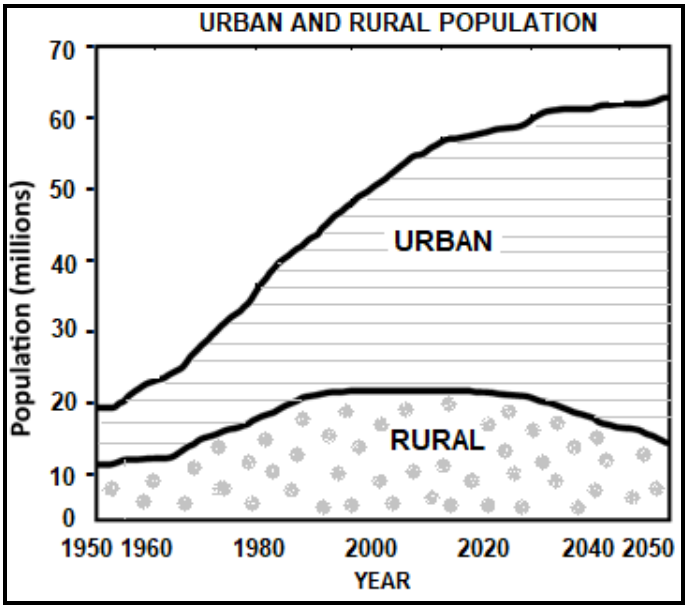
[Source: https://www.google.com/search?sphere of influence]

(i) population of 1 000.
(ii) smaller radius.
(iii) population of 100 000.
(iv) larger radius.

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

1.3 Refer to the extract and graph below based on rural depopulation.

DEPOPULATION IN THE ALFRED NZO DISTRICT MUNICIPALITY



[Source: Examiner's own sketch]

Villages in the Alfred Nzo District Municipality in the remote Eastern Cape cover thousands of hectares along the N2 (national route). Extreme social and economic poverty exist in these villages. This is a common problem in many other parts of rural South Africa. The Alfred Nzo District Municipality is the most impoverished (poor) rural region in the country, where more than 65% of the people live below the poverty line and 70% of the population is not economically active.

These extreme social and economic conditions are made worse by limited access to services, especially water, healthcare and education. Fewer economic activities have a negative social and economic impact on the area. Rural settlements are no longer an attractive option for rural dwellers.

[Adapted from mg.co.za]

1.3.1 What evidence on the graph indicates that rural depopulation has been taking place since 2020? (1 x 1) (1)

1.3.2 Name TWO social services in the extract that are lacking in the Alfred Nzo District. (2 x 1) (2)

1.3.3 Give TWO possible reasons for the lack of social services in the Alfred Nzo District. (2 x 2) (4)

1.3.4 Why do rural settlements experience a negative economic impact as a result of rural depopulation? (2 x 2) (4)

1.3.5 Suggest sustainable measures that could be implemented by municipalities of rural areas to reduce this negative economic impact. (2 x 2) (4)

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1.4 Refer to the extract, photograph **A** and sketch **B** based on commercial decentralisation.

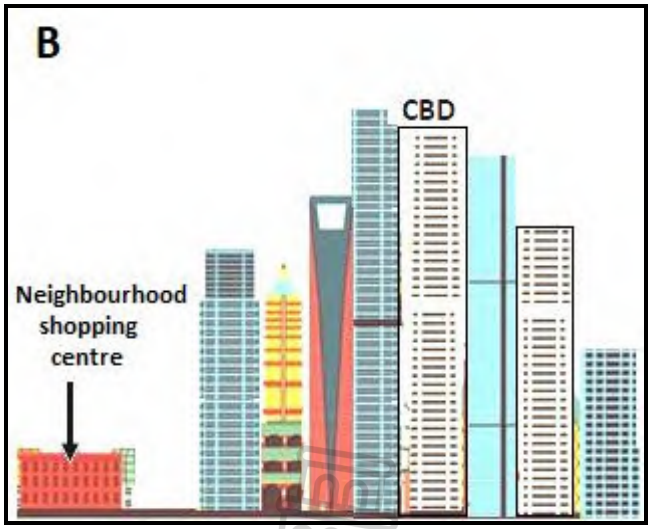
CBD DECENTRALISATION HERE TO STAY

A central business district (CBD) is the original commercial business centre of a city. There are now many outlying business districts (OBD) caused by commercial decentralisation. Apart from the physical expansion of urban settlements that made CBDs more difficult to reach, the causes for growing decentralisation of businesses include high rents, crime, pollution and the lack of parking.

Well-located decentralised nodes remain sought-after for businesses looking for secure premises for their companies, park-like surroundings and sufficient parking facilities. Office parks, neighbourhood shopping centres and regional shopping centres are often close to sought-after residential areas (suburbs) which provide a customer base.

[Adapted from *Deccan Chronicle* by GA Rice, in *International Encyclopaedia of Human Geography*]





[Source: https://www.google.com/search?tbs=sbi:AMhZZivd3Zv_1RXZ2VGag]

1.4.1 Define the concept *commercial decentralisation.* (1 x 2) (2)

1.4.2 State ONE factor evident in the CBD (photograph **B**) that encourages commercial decentralisation. (1 x 1) (1)

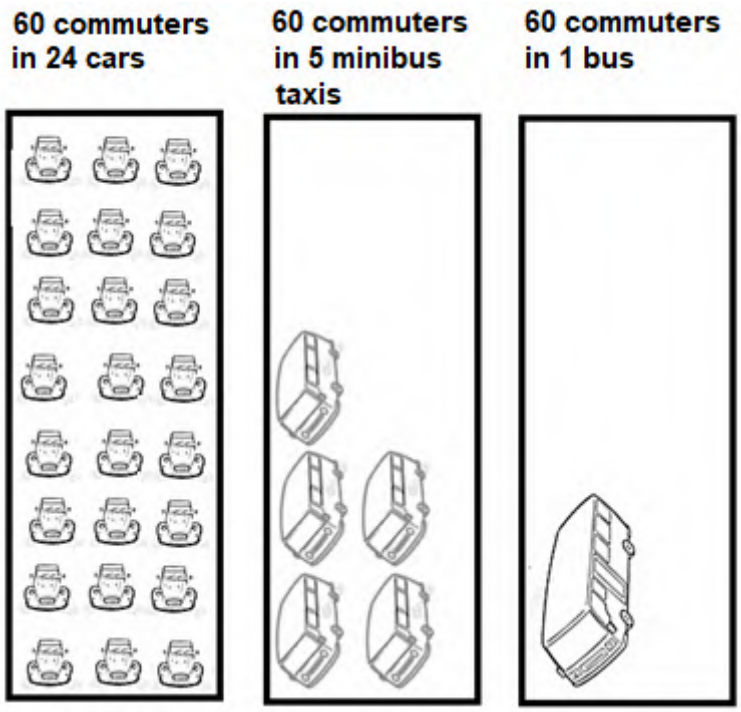
1.4.3 How do high rentals and crime (mentioned in the extract) lead to increasing commercial decentralisation? (2 x 2) (4)

1.4.4 Explain why neighbourhood shopping centres are an attractive option for the location of businesses. (2 x 2) (4)

1.4.5 How can the increase in the number of neighbourhood shopping centres have a negative impact on businesses in the CBD? (2 x 2) (4)

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ν on the influence of public transport systems on



THE IMPACT OF PUBLIC TRANSPORT ON TRAFFIC CONGESTION

The use of public transport is encouraged because it reduces traffic congestion.

In South Africa, the most common form of public transport is the use of minibus taxis. Although public transport (e.g. minibus taxis and buses) plays a valuable role in reducing the number of private vehicles on the road, it is associated with a number of challenges. These challenges are associated with economic injustices to commuters*.

Glossary:
*commuters: people who travel from home to work daily

[Source: Examiner's own sketch]

1.5.1 According to the source, which type of transport would create the most traffic congestion? (1 x 1) (1)

1.5.2 Give a reason for your answer to QUESTION 1.5.1. (1 x 2) (2)

1.5.3 How can improved public transport systems decrease traffic congestion? (2 x 2) (4)

1.5.4 In a paragraph of approximately EIGHT lines, explain why the use of public transport such as minibus taxis and buses could be an economic injustice (concern) to commuters. (4 x 2) (8)

[60]

QUESTION 2: ECONOMIC GEOGRAPHY OF SOUTH AFRICA

2.1 Choose the correct word(s) from those given in brackets. Write only the word(s) next to the question numbers (2.1.1 to 2.1.7) in the ANSWER BOOK, e.g. 2.1.8 Mining.

2.1.1 Mining is an example of a (primary/secondary) economic activity.

2.1.2 The price of minerals fluctuates in the mining industry due to the (foreign exchange/foreign investment) rate.

2.1.3 (Geothermal gradient/Unskilled labour) is an example of a physical factor that affects mining.

2.1.4 Platinum is an example of a (renewable/non-renewable) resource.

2.1.5 Platinum is mined in South Africa in the (Western Cape/North West).

2.1.6 Platinum is used as a raw material in the production/generation of (power/jewellery).

2.1.7 (Labour unrest/Labour availability) in South Africa impacts negatively on the production of platinum. (7 x 1) (7)

2.2 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 (2.2.1 to 2.2.8) in the ANSWER BOOK, e.g. 2.2.9 D.

2.2.1 The tertiary sector is also referred to as the … sector.

A informal
B service
C health
D transport

2.2.2 An example of an activity in the tertiary sector is …

A mining for gold.
B manufacturing wine.
C foreign exchange.
D canning beans.

2.2.3 Countries that are dominated by the tertiary sector reflect a/an …

(i) highly skilled labour force.
(ii) poorly skilled labour force.
(iii) efficient transport system.
(iv) variety of mining activities.

A (i) and (ii)
B (ii) and (iv)
C (i) and (iii)
D (iii) and (iv)

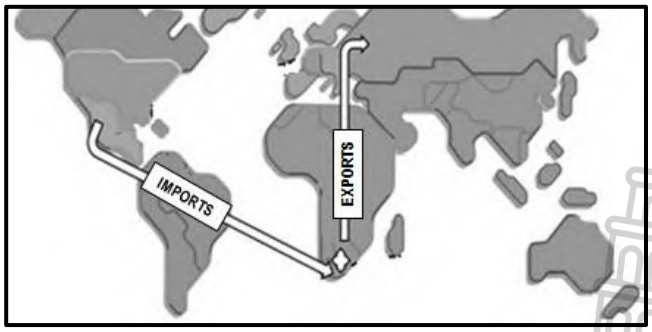
2.2.4 The contractual arrangement between countries relating to their trade relationship is known as a …

A trade agreement.
B balance of payment.
C trade strategy.
D balance of trade.

2.2.5 Goods that are exchanged within a country is known as … trade.

A international
B regional
C domestic
D provincial

2.2.6 The type of trade shown on the map is … trade.



[Adapted from https://www.freepik.com/colorful-world-map]

A national
B regional
C domestic
D international

2.2.7 The economic disadvantage of importing goods:

A Creation of local employment
B Production suffers locally
C Goods become cheaper
D Growth of local industries

2.2.8 An advantage of South Africa having a favourable balance of trade:

(i) Foreign capital decreases
(ii) Jobs are created
(iii) Retrenchment of workers
(iv) Stimulates economic growth

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

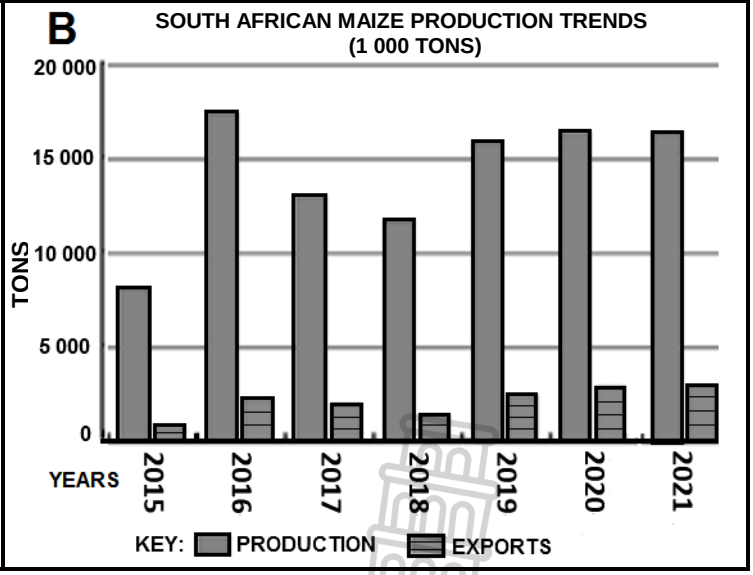
2.3 Refer to the infographic on maize farming in South Africa below.

MAIZE FARMING IN SOUTH AFRICA

More than 10 million tons of maize grain is produced in South Africa annually on approximately 3,1 million hectares (ha) of land. Half of the production consists of white maize for human food consumption. Maize needs 450 to 600 mm of rainfall per season, which is mainly acquired from the soil moisture reserves. The challenges in maize production include variations in environmental and climatic conditions, poor soils, labour issues and low-yielding seeds among others.



[Adapted from https:/www.google.com/Maize farming]



2.3.1 Name the main maize-producing province (**A**) in South Africa. (1 x 1) (1)

2.3.2 Refer to the graph. Compare the amount of maize produced to the amount that is exported. (1 x 2) (2)

2.3.3 Why does South Africa have a large domestic (local) market for maize? (2 x 2) (4)

2.3.4 How will climatic factors reduce maize production? (2 x 2) (4)

2.3.5 Explain the economic importance of maize production to the South African economy. (2 x 2) (4)

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2.4 Refer to the infographic on the Port Elizabeth-Uitenhage core industrial region and the Coega Industrial Development Zone (IDZ) below.

PORT ELIZABETH-UITENHAGE INDUSTRIAL REGION

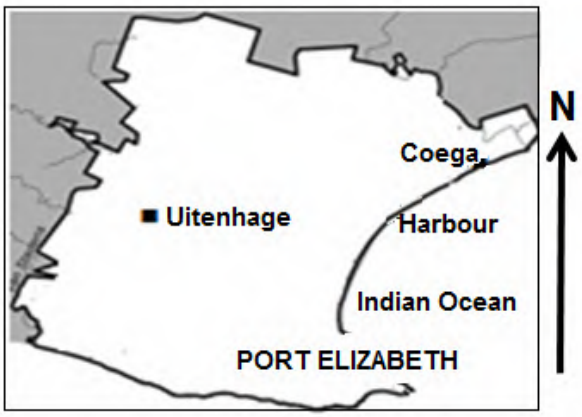
While the automotive sector continues to dominate, the Coega Industrial Development Zone holds the key to expanding and diversification of the industries* of the Port Elizabeth-Uitenhage core industrial region.

The long-term presence of Volkswagen and Isuzu has been uplifted by a multi-phase R11 billion investment by Beijing Automotive Group (BAIC) at the industrial development zone (IDZ).

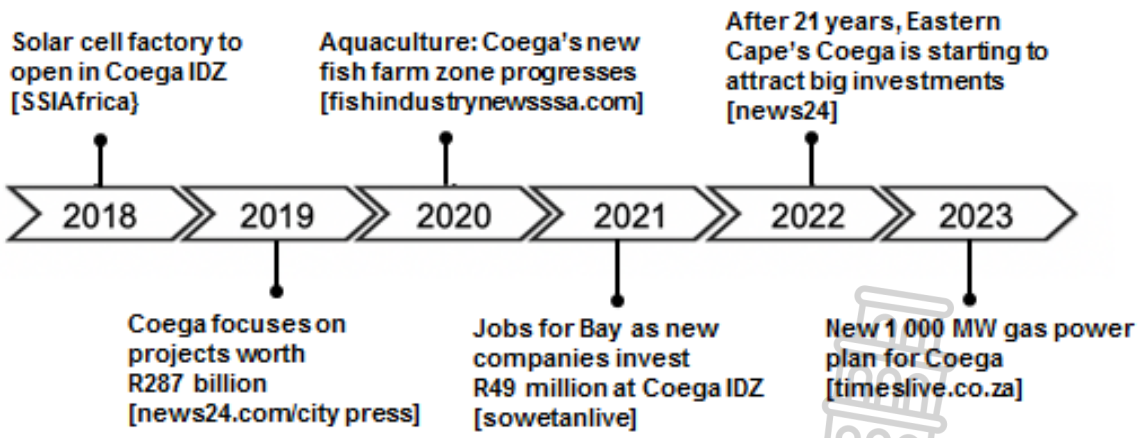
Glossary:
*diversification of the industries: allowing a greater variety of industries to locate in this area

[Adapted from globalafricannetwork.com]

MAP OF PORT ELIZABETH-UITENHAGE CORE INDUSTRIAL REGION AND THE COEGA IDZ



TIMELINE OF COEGA-RELATED NEWSPAPER HEADLINES



[Adapted from https://www.googlr.com/search?q=images Port Elizabeth]

2.4.1 Name the type of transport infrastructure indicated on the map, which favours the location of the Port Elizabeth-Uitenhage core industrial region. (1 x 1) (1)

2.4.2 The (primary/secondary) sector dominates the economy of the Port Elizabeth-Uitenhage core industrial region. (1 x 1) (1)

2.4.3 Name ONE major company in the extract that has invested in the Port Elizabeth-Uitenhage core industrial region. (1 x 1) (1)

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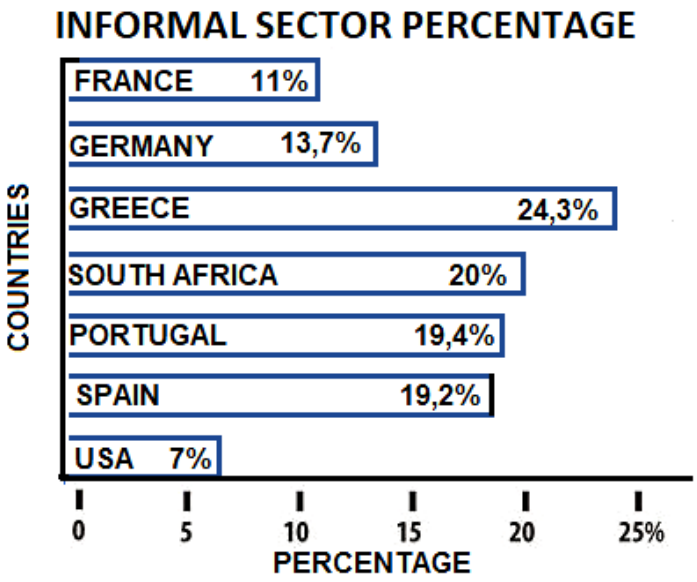
2.4.4 Quote TWO headlines from the timeline of the Coega-related newspaper headlines to show that diversification of industries is taking place. (2 x 1) (2)

2.4.5 How would this diversification of industries benefit the labour force in the Port Elizabeth-Uitenhage core industrial region? (2 x 2) (4)

2.4.6 Explain why the Coega Industrial Development Zone would be an attractive location for investment by overseas companies. (3 x 2) (6)

2.5 Refer to the extract and graph on the informal sector below.

INFORMAL SECTOR



The vast majority of informal sector operators (73%) earn well below the income tax (personal tax paid to the government) threshold of R79 000 per annum, set by the South African Revenue Service (SARS).

In addition, many informal sector workers, particularly those in retail, pay VAT (tax paid for goods purchased). However, unlike their counterparts in the formal sector, they are not able to claim these amounts back from the tax authorities.

Permits allow people to trade legally. However, the legal requirement of encouraging informal traders to obtain permits has been met with reluctance (not wanting).

The informal sector is worth supporting because it makes up a large part of the workforce. Further, while earnings are often very low in the informal sector, this type of employment is particularly important in keeping households above the poverty line.

[Adapted from *The Conversation*, Rhodes University, Mike Rogan/Caroline Skinner]

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2.5.1	According to the graph, what percentage of South Africa's population is classified as the informal sector?	(1 x 1)	(1)
2.5.2	Give economic reasons that have led to such a large informal sector in South Africa.	(2 x 1)	(2)
2.5.3	Explain the economic importance of the informal sector.	(2 x 2)	(4)
2.5.4	In a paragraph of approximately EIGHT lines, suggest strategies that could be implemented to improve the informal sector.	(4 x 2)	(8)
			[60]

TOTAL SECTION A: 120

SECTION B

QUESTION 3: GEOGRAPHICAL SKILLS AND TECHNIQUES

GENERAL INFORMATION ON GQEBERHA (PORT ELIZABETH)



Coordinates: 33°57'S; 25°36'E

Gqeberha (Port Elizabeth) is a major seaport (harbour) and a densely populated city in the Eastern Cape in South Africa. It lies at Algoa Bay in the Indian Ocean.

The residential area is on flat land, with an industrial sector at North End. Gqeberha is characterised by a large number of green belts.

The Coega Industrial Development Zone is located close to Gqeberha. It has a world-class infrastructure which provides for the increased accessibility of services and industries to the rest of the world.

[Source: https://www.google.com/search?q Port Elizabeth]

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
Golf course	Gholfbaan
Firebreak	Voorbrandstrook

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3.1 MAP SKILLS AND CALCULATIONS

3.1.1 The scale of the orthophoto map:

A 1 cm represents 100 m
B 1 cm represents 100 cm
C 1 m represents 500 m
D 1 cm represents 500 cm (1 x 1) (1)

3.1.2 The coordinates of the stadium at **F** in block **B4** on the topographical map is approximately …

A 33°56'19"S and 25°37'00"E.
B 33°55'19"S and 25°35'00"E.
C 33°56'19"S and 25°36'00"E.
D 33°57'19"S and 25°34'00"E. (1 x 1) (1)

Refer to the orthophoto map.

3.1.3 Calculate the distance of the runway in metres (m) between **6** and **7** on the orthophoto map.

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

3.1.4 Why does the runway between **6** and **7** appear larger on the orthophoto map as compared to the topographical map? (1 x 1) (1)

3.1.5 Refer to the topographical map. Use the information below to calculate the magnetic declination for 2023.

Difference in years: 2023 – 2021 = 2 years (4 x 1) (4)

3.1.6 What is the purpose of calculating the magnetic declination (MD) for the current year? (1 x 1) (1)

3.2 MAP INTERPRETATION

Refer to the photographs (**Y** and **Z**) below of residential areas in Gqeberha (Port Elizabeth).

Y



Z



[Source: https://www.google.com/search?qWalmer]

3.2.1 (a) Which photograph, **Y** or **Z**, matches the residential area **G** on the topographical map? (1 x 1) (1)

(b) Give evidence from the topographical map to support your answer to QUESTION 3.2.1(a). (1 x 2) (2)

Gqeberha (Port Elizabeth) has a number of green belts.

3.2.2 (a) Give an example of ONE type of green belt on the topographical map. (1 x 1) (1)

(b) How do green belts reduce environmental injustices in Gqeberha (Port Elizabeth)? (1 x 2) (2)

Gqeberha (Port Elizabeth) is characterised by light and heavy industries.

3.2.3 (a) Give evidence from the topographical map that North End, **H** in blocks **A4** and **B4**, is a heavy industrial area. (1 x 1) (1)

(b) Identify the human-made feature that would limit the North End industrial area, **H**, from expanding towards the north. (1 x 1) (1)

(c) How would employment opportunities created by industrial area **H** be of economic benefit to the local area? (1 x 2) (2)

Refer to the topographical map and the orthophoto map.

3.2.4 Why is the airport located in the rural-urban fringe of Gqeberha (Port Elizabeth)? (1 x 2) (2)

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3.3 GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

Refer to block **D2** on the topographical map.

3.3.1 Give evidence that buffering is taking place in block **D2**. (1 x 1) (1)

3.3.2 What is the purpose of buffering in this block? (1 x 2) (2)

Refer to block **B1** on the topographical map.

3.3.3 What is a *data layer*? (1 x 2) (2)

3.3.4 Identify the transport data layer in block **B1**. (1 x 1) (1)

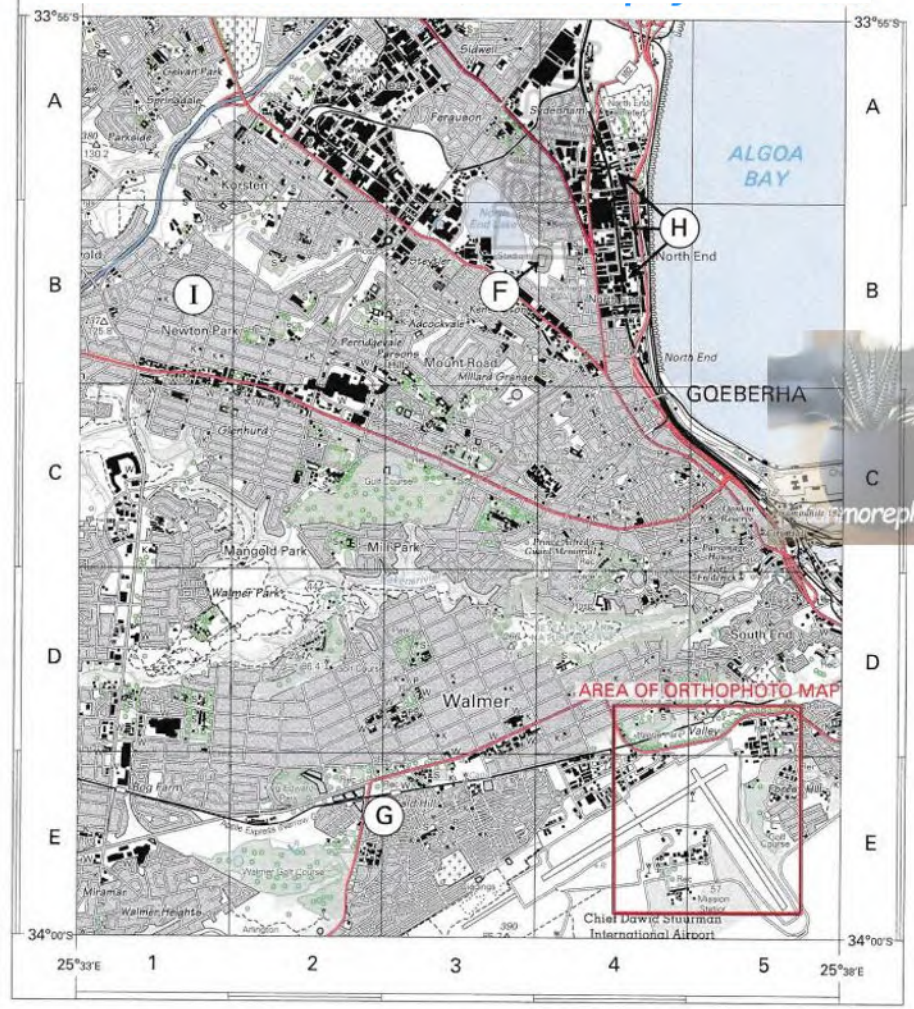
Refer to **I** in block **B1**.

3.3.5 Why would the transport data layer (answer to QUESTION 3.3.4) cause traffic congestion? (1 x 2) (2)

TOTAL SECTION B: 30
GRAND TOTAL: 150

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EXTRACT FROM 3325DC & DD and 3425BA GQEBERHA (PORT ELIZABETH) 1:50 00



Gemiddelde magnetiese deklinasie 29°00' Wes van Ware Noord (Julie 2021).
Gemiddelde jaarlikse verandering 12' Weswaarts (Julie 2021 - Junie 2022).

Mean magnetic declination 29°00' West of True North (July 2021).
Mean annual change 12' Westwards (July 2021 - June 2022).

REFERENCE

National Freeway; National Route	International Boundary and Beacon	Fence; Wall
Arterial Route	Provincial Boundary	Windpump; Monument
Main Road	Protected Area	Communication Tower
Secondary Road; Bench Mark	Perennial River	Mine Dump; Excavation
Other Road; Bridge	Perennial Water	Trigonometrical Station; Marine Beacon
Track and Hiking Trail	Non-perennial River	Lighthouse and Marine Light
Railway; Station or Siding	Non-Perennial Water	Cemetery; Grave
Other Railway; Tunnel	Dry Water Course	Erosion; Sand
Embankment; Cutting	Dry Pan	Woodland
Power Line	Marsh and Vlei	Cultivated Land
Built-up Area (High, Low Density)	Pipeline (above ground)	Orchard or Vineyard
Buildings; Ruin	Water Tower; Reservoir; Water Point	Recreation Ground
Post Office; Police Station; Store	Coastal Rocks	Row of Trees
Place of Worship; School; Hotel	Prominent Rock Outcrop	Original Farms

XTRACT FROM 3325 DC 23 GQEBERHA (PORT ELIZABETH) ortho - rectified image1:10 0



CONTOUR INTERVAL 5 METRES - KONTOERTUSSENRUIMTE 5 METER

VERKLARING

Nasionale Deurpad; Nasionale Roete	Internasionale Grens en Baken	Draadheining; Muur
Hoofverkeersroete	Provinsiale Grens	Windpomp; Monument
Hoofpad	Bewarings Gebied	Kommunikasietoring
Sekondêre Pad; Hoogtemerk	Standhoudende Rivier	Mynhoop; Uitgrawing
Ander Pad; Brug	Standhoudende Water	Peilbaken; Seevaartbaken
Dowwe Pad en Voetslaanpad	Nie-standhoudende Rivier	Vuurtoring en Seevaartlig
Spoorweg; Stasie of Sylyn	Nie-standhoudende Water	Begraafplaas; Graf
Ander Spoorweg; Tonnel	Droë Loop	Erosie; Sand
Opvulling; Deurgrawing	Droë Pan	Beboste Gebied
Kraglyn	Moeras en Vlei	Bewerkte Land
Beboude Gebied (Hoë, Lae Digtheid)	Pyplyn (bo die grond)	Boord of Wingerd
Geboue; Murasie	Watertoring; Reservoir; Waterpunt	Ontspanningsterrein
Poskantoor; Polisiestasie; Winkel	Kuslynrotse	Rye Bome
Plek van Aanbidding; Skool; Hotel	Prominente Klipbank	Oorspronklike Plase