KWAZULU-NATAL PROVINCE

EDUCATION
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

GEOGRAPHY P2

PREPARATORY EXAMINATION

SEPTEMBER 2025

MARKS: 150

TIME: 3 hours

This question paper consists of 14 pages.

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 topographical map 2926AA BLOEMFONTEIN-NOORD (NORTH) and a 1 : 10 000 orthophoto map 2926AA 10 BLOEMFONTEIN-NOORD (NORTH) 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.

Please Turn Over

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

QUESTION 1: RURAL AND URBAN SETTLEMENTS

1.1 Refer to diagrams **A** and **B** of the dispersed and nucleated rural settlements below. Match the statements with either A or B. Write only the letter A or B next to the question numbers (1.1.1 to 1.1.8) in the ANSWER BOOK, e.g. 1.1.9 B.
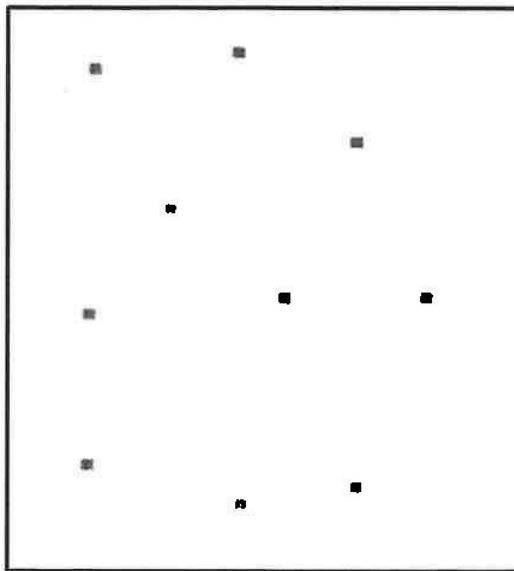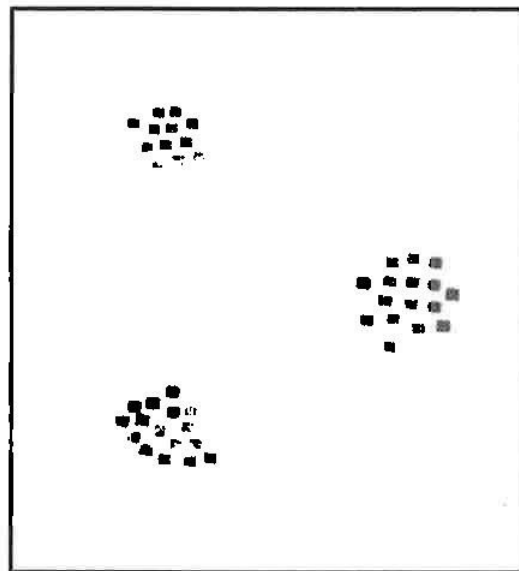
DIAGRAM A   **DIAGRAM B**

[Source: https://quizlet.com/466498073/2016-ap-human-geography-multiple-choice-answers-flash-cards]

1.1.1 Buildings are widely spaced.

1.1.2 Sharing farming equipment (tools).

1.1.3 Lacks privacy.

1.1.4 Easy target for criminals.

1.1.5 Basic services are distant (far).

1.1.6 Easy to socialise.

1.1.7 Where farming is associated with more (large) profit.

1.1.8 Reduces the need for manual labour and the cost of production.   (8 x 1) (8)

1.2   Choose a concept in COLUMN B that matches the description in COLUMN A.
       Write only the letter (A – H) next to the question number (1.2.1 to 1.2.7)
       in the ANSWER BOOK, e.g. 1.2.8 I

COLUMN A	COLUMN B
1.2.1. The total area that is serviced by a central place.	A. Low-order goods
1.2.2 Side view of a town or city.	B. Urban hierarchy
1.2.3 Goods that are needed on daily basis.	C. Urban Morphology
1.2.4 Minimum number of customers needed for a service to make profits.	D. Sphere of influence
1.2.5 Describes the ranking of urban areas according to their size and functions.	E. Urban Sprawl
1.2.6 External appearance of an urban settlement (form and structure).	F. Range of goods
1.2.7 Uncontrolled expansion of a city.	G. Threshold population
	H. Urban profile

(7 x 1) (7)

1.3   Refer to the graph and extract below on Rural- Urban Migration.
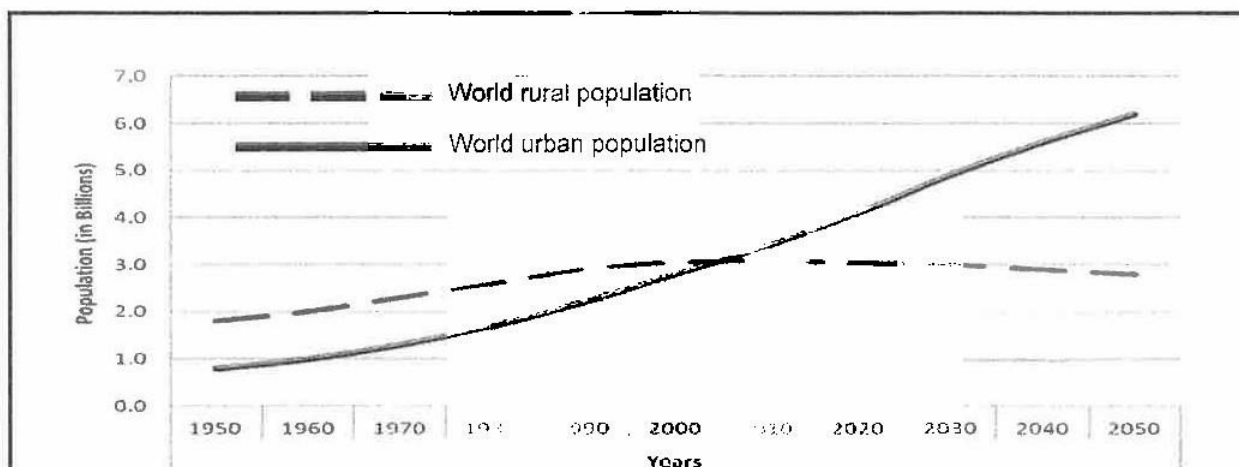
Rural depopulation is an increasingly pressing issue in South Africa, with significant consequences for the social, economic, and environmental well-being of the nation. With the ongoing migration of people from rural areas to urban areas, the challenge of rural depopulation has become a central topic in the public policy discussion.

Rural depopulation refers to the decline in population density in rural areas. This can lead to a loss of social cohesion (unity), economic stagnation, and environmental degradation in affected rural areas, posing challenges for policymakers and local communities.

Ultimately, the future of South Africa's rural areas depends on the ability of policymakers, local governments, and communities to work together to address the complex factors driving rural depopulation.

[SOURCE: Adapted from: Rural Depopulation in South Africa Per Province: A Growing Crisis]

1.3.1   Define the concept *rural depopulation*.   (1 x 2) (2)

1.3.2   What trend is shown by the world urban population migration
        pattern, in the graph above, between 1990 and 2020?   (1 x 1) (1)

1.3.3   Discuss TWO push factors that cause people to leave rural areas.   (2 x 2) (4)

1.3.4   In a paragraph of approximately EIGHT LINES explain the effects
        of rural-urban migration on rural areas.   (4 x 2) (8)

1.4   Refer to the diagram below on urban land use zones.
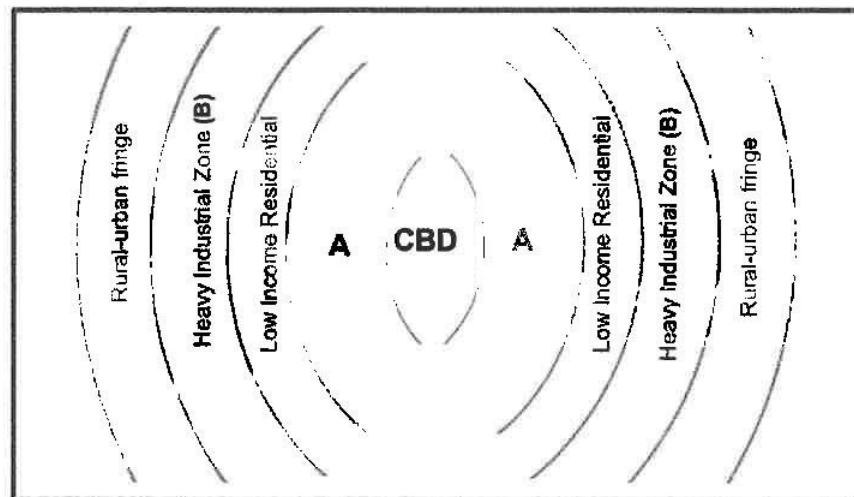
[Source: examiner's own sketch]

1.4.1   What is an *urban land use zone*?   (1 x 2) (2)

1.4.2   Why is the CBD located at the centre of the city?   (1 x 2) (2)

1.4.3   (a)   Identify land use zone labelled **A** in the diagram above.   (1 x 1) (1)

        (b)   State TWO characteristics of the land use zone identified
              in QUESTION 1.4.3 (a) above.   (2 x 1) (2)

1.4.4   Refer to heavy industrial zone **B** in the diagram.

        (a)   Describe the expected topography (relief) of the land.   (1 x 2) (2)

        (b)   Give ONE reason for your answer in QUESTION 1.4.4 (a)
              above.   (1 x 2) (2)

1.4.5   Explain why the CBD and the heavy industrial zone are often
        considered incompatible (located far away from each other).   (2 x 2) (4)

1.5　Refer to the photograph and the extract below on traffic congestion and answer the questions that follow.

Road construction, accidents, reckless driving, and insufficient police presence have been identified as the main factors contributing to severe traffic gridlocks (congestion) on the N3.

The traffic congestion on the N3 stretch between Pietermaritzburg to Durban, which is arguably the busiest road in KwaZulu-Natal, has left many residents frustrated.

Source Adapted: https://witness.co.za/news/special-focus/2023/09/29/traffic-cause-of-chaos-on-the-n3/

1.5.1　Define the concept *traffic congestion*. (1 x 2) (2)

1.5.2　According to the extract, name ONE reason for traffic congestion on the N3. (1 x 1) (1)

1.5.3　Mention TWO environmental problems caused by traffic congestion. (2 x 1) (2)

1.5.4　How does traffic congestion negatively impact the economy of KwaZulu-Natal. (2 x 2) (4)

1.5.5　Explain sustainable strategies that local government and authorities can implement to reduce traffic congestion. (3 x 2) (6)

[60]

QUESTION 2: ECONOMIC GEOGRAPHY OF SOUTH AFRICA

2.1   Refer to the diagram below. Match the statements with either primary, secondary, tertiary, or quaternary. Write only the answer next to the question numbers in the ANSWER BOOK, example 2.1.9 Primary.
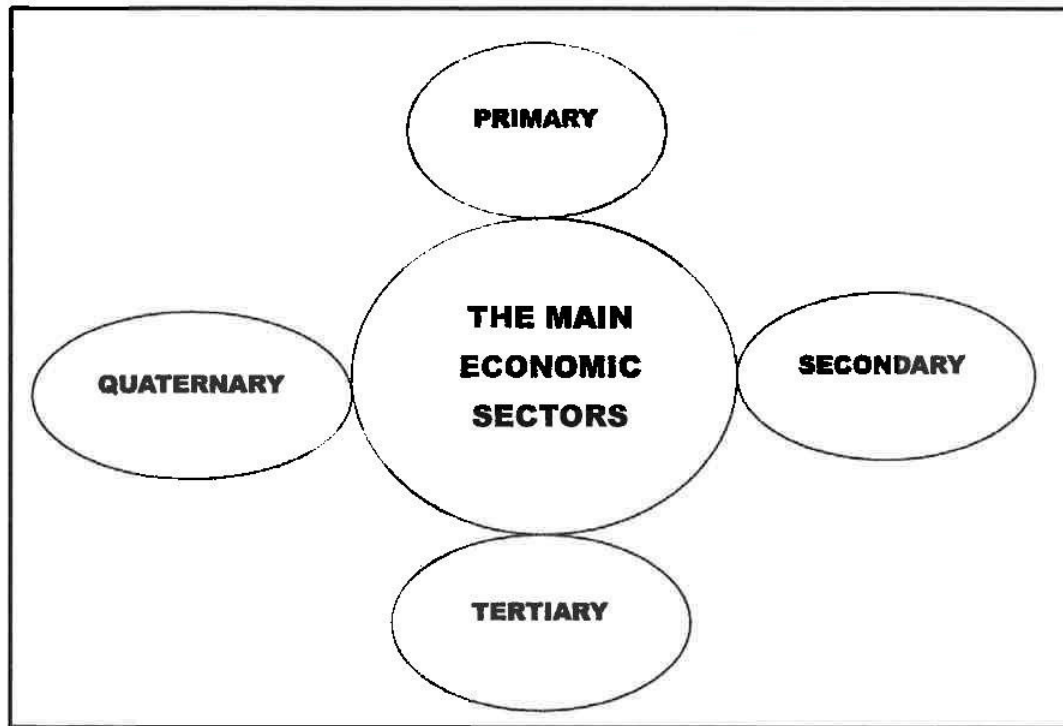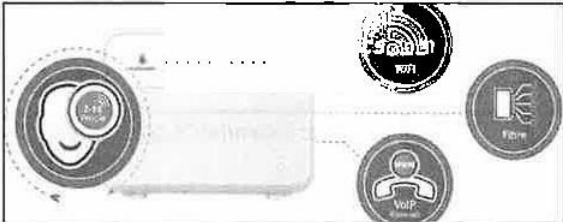

[Source: Examiner's own diagram]

2.1.1   This economic sector delivers various services to support individuals and businesses.

2.1.2   This sector involves gathering natural resources directly from the Earth.

2.1.3   This sector focuses on turning raw materials into usable or finished goods.

2.1.4   This sector involves intellectual activities such as research, information technology, and knowledge-based services.

2.1.5   This sector is responsible for producing garments, shoes, and textiles.

2.1.6   This sector has the smallest impact on South Africa's overall economic output (GDP).

2.1.7   This sector includes activities like banking, education, and retail services.

2.1.8   Transport and communication are examples of this economic activity.   (8 x 1) (8)

2.2   Match the statements in COLUMN A with the type of industry in COLUMN B.
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
2.2.1	The bakery in the figure below is a/an … industry. 	Y Z	market-orientated raw-material orientated
2.2.2	Industries that are generally located close to the central business district are known as … industries	Y Z	heavy light
2.2.3	The telecommunication illustrated below is an example of a … industry. 	Y Z	bridge ubiquitous
2.2.4	Associated with high levels of pollution and occupy large spaces.	Y Z	heavy light
2.2.5	Industries that are found near the source of raw material.	Y Z	market orientated raw-material orientated
2.2.6	These industries are not dependent on any specific locational factors.	Y Z	footloose ubiquitous
2.2.7	Located where one means of transport is replaced by another. 	Y Z	break-of-bulk industry light industry

(7 x 1) (7)

2.3 The infographic below shows sugar cane farming in South Africa.

[Source: https://www.statista.com]
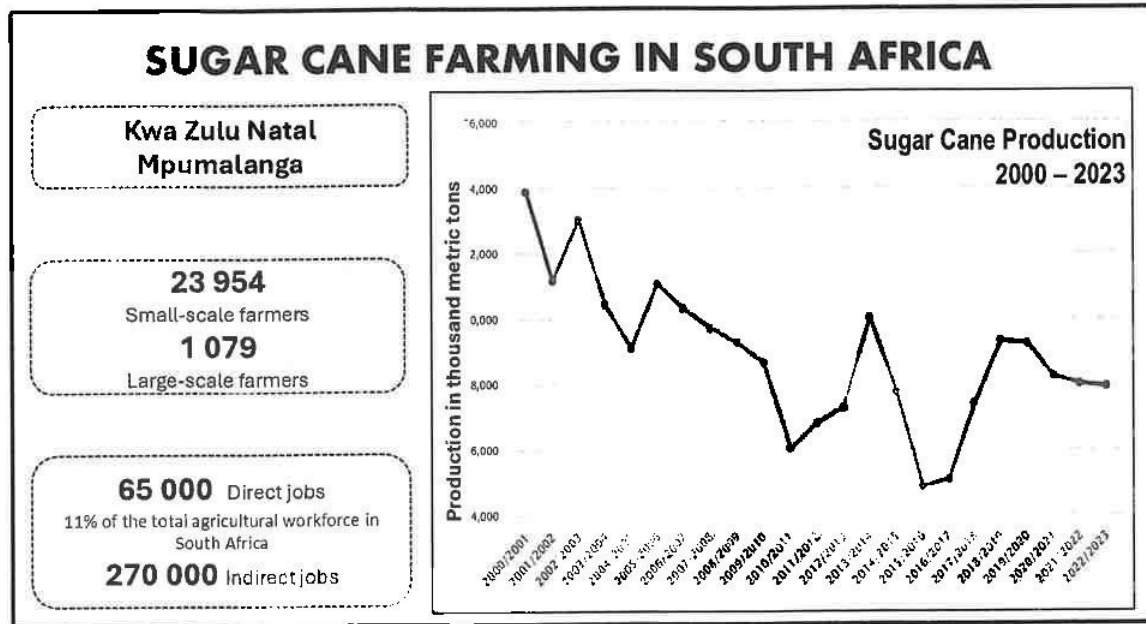
2.3.1 According to the infographic, how many direct jobs are created by sugar cane farming in KwaZulu-Natal and Mpumalanga? (1 x 1) (1)

2.3.2 There is a general decrease in sugar cane production in South Africa. Explain at least ONE factor that contribute towards this decrease. (1 x 2) (2)

2.3.3 Discuss why the two provinces mentioned in the infographic are favourable for sugar cane farming. (2 x 2) (4)

2.3.4 In a paragraph of approximately EIGHT lines, explain the importance of sugar cane production to the South African economy. (4 x 2) (8)

2.4   The extract below is on Dube Trade Port Industrial development zone (IDZ).

> Dube Trade Port IDZ has seen a hive (an increase) of activities this week as major automotive (motor manufacturing) companies such as Mahindra South Africa and Auto Investment Holdings Group (AIH Group), pledged their R1.2 billion investment and have set up shop in KwaZulu-Natal's Trade Zone.
>
> The CEO of Toyota SA Andrew Kirby said the investment will create 250 permanent jobs and many more in the local Durban-based businesses that offer supply chain, transport, and light industries to the new joint venture. Elevate skill levels within the Durban region and contribute to the overall industrialization and sustainability of the local automotive sector.

[Source: https://www.iol.co.za/sunday-tribune/news/dube-tradeport]

2.4.1   Define the concept *industrial development zone*.   (1 x 2) (2)

2.4.2   According to the extract, name ONE company that invested in Dube Trade Port.   (1 x 1) (1)

2.4.3   How does the foreign investment increase the Dube Trade Port contribution to the gross domestic production (GDP) of South Africa?   (1 x 2) (2)

2.4.4   In what way does the creation of jobs by the Dube trade port impact positively on the people of Kwazulu-Natal?   (2 x 2) (4)

2.4.5   Discuss THREE factors that influenced the development of the Dube Trade Port IDZ.   (3 x 2) (6)

2.5   The photograph below shows an informal business located close to a shopping centre.

[Source: aet.org.za/reflecting-on-2018-part-2/]

2.5.1   Define the concept *informal sector*.   (1 x 2) (2)

2.5.2   Mention ONE evidence from the photograph above indicating that this is an informal sector.   (1 x 1) (1)

2.5.3   Explain TWO reasons for high informal sector economy in South Africa.   (2 x 2) (4)

2.5.4   Discuss at least TWO negative impact of high informal sector economy in South Africa.   (2 x 2) (4)

2.5.5   Suggest measures that the local authorities could implement to improve the working conditions of informal traders.   (2 x 2) (4)

[60]

TOTAL SECTION A: 120

SECTION B

QUESTION 3: GEOGRAPHICAL SKILLS AND TECHNIQUES

GENERAL INFORMATION ON BLOEMFONTEIN
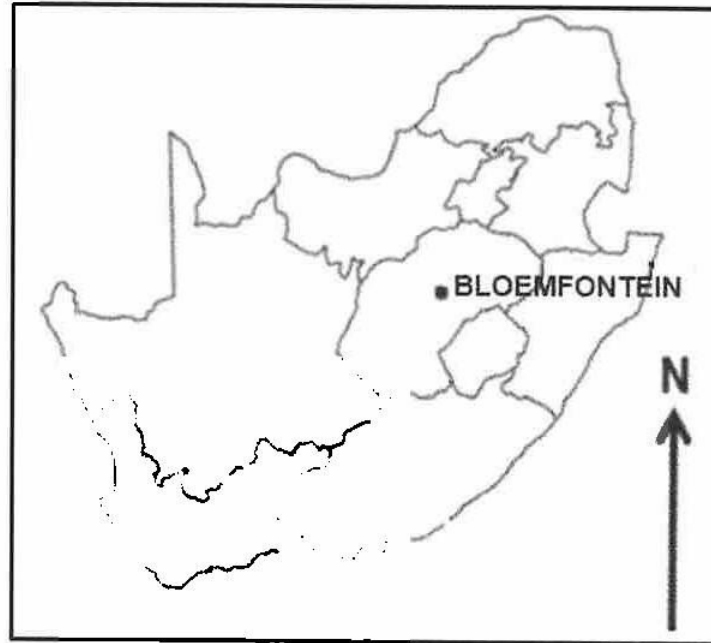
Coordinates: 29°05'S; 26°09'E

Bloemfontein is the capital city of the Free State. It is located in central South Africa on the southern edge of the Highveld. The area is generally flat with isolated hills. Although agriculture is the main primary activity, businesses mainly drive Bloemfontein's economy.

Due to the many businesses, it has attracted more people into the area. This has led to many new developments.

[Adapted from https://en.wikipeida.org/wiki/Bloemfontein]

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

ENGLISH	**AFRIKAANS**
Spring	Spruit
Game reserve	Wildreservaat
Roads under construction	Paaie onder konstruksie

3.1 MAP SKILLS AND CALCULATIONS

3.1.1 In which Province is Bloemfontein?   (1 x 1) (1)

3.1.2 In the map index **2926 AA** Bloemfontein, **29** indicates the line of (longitude / latitude)   (1 x 1) (1)

3.1.3 The contour interval of the topographical map is (5 / 20) metres.   (1 x 1) (1)

3.1.4 Calculate the average gradient from **6** in block **A3** to **7** in block **B4** on the orthophoto map.   (4 x 1) (4)

Use the following information:

Measured distance (map distance) between **6** and **7** on the orthophoto map is 7.5 cm.

Formula: $$\frac{\textbf{Vertical Interval (VI)}}{\textbf{Horizontal Equivalent (HE)}}$$

3.1.5 The magnetic **declination** for the year 2025 is 22°16′ West of True North. Use this information and the orthophoto map to calculate the **magnetic** bearing from spot height **6** (1431) in block A3 to spot height **7** (1427) in block B4.   (3 x 1) (3)

3.2 MAP INTERPRETATION

3.2.1 The dominant land use in block A1 on the topographical map is …

    A   mining
    B   farming
    C   fishing
    D   forestry   (1 x 1) (1)

Refer to blocks **A1**, **A2** and **B1** on the topographical map.

3.2.2 Identify the human made feature in block **A2** and **B2** that supports farming activities.   (1 x 1) (1)

3.2.3 Give TWO pieces of evidence that the level of agriculture practised in these blocks (**A1**, **A2** and **B2**) is commercial farming.   (2 x 1) (2)

3.2.4   Refer to the sewage works in block **B3** on the topographical map.

(a)   Identify the land use zone where the sewage works are located.   (1 x 1) (1)

(b)   Give a reason why the sewage works are suitable in this land use zone.   (1 x 2) (2)

3.2.5   Identify the type of economic activity taking place in block **C5** on the topographical map.   (1 x 1) (1)

3.2.6   Give ONE piece of evidence from the map to support your answer to QUESTION 3.2.5 above.   (1 x 1) (1)

3.2.7   Identify the dominant street pattern in block **E3** on the topographical map.   (1 x 1) (1)

3.2.8   State ONE advantage of the street pattern identified in QUESTION 3.2.7 above.   (1 x 2) (2)

3.3   **GEOGRAPHICAL INFORMATION SYSTEMS (GIS)**

3.3.1   Define concept *attribute data*.   (2 x 1) (2)

3.3.2   Use the table below to match the information in COLUMN A with the description in COLUMN B.   (1 x 1) (1)

COLUNM A	COLUMN B
Attribute data of schools	A. 29°57′20′′S
	B. 620 leaners

3.3.3   Refer to block A4 on the topographical map and name ...

(a)   ONE linear feature.   (1 x 1) (1)

(b)   ONE point feature.   (1 x 1) (1)

3.3.4   Identify ONE data layer that limits development in block **A1** on the orthophoto map.   (1 x 1) (1)

3.3.5   How does this data layer (answer to QUESTION 3.3.2 above) limit development in this area.   (1 x 2) (2)

TOTAL SECTION B: [30]

TOTAL MARKS: 150