GAUTENG PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

JUNE EXAMINATION
GRADE 12

2026

MARKING GUIDELINES

GEOGRAPHY

(PAPER 2)

27 pages

PRINCIPLES FOR MARKING GEOGRAPHY – JUNE 2026

The following marking principles are developed to standardise marking processes.

MARKING

- ALL answers MUST be marked, irrespective of whether they are correct or incorrect.
- Where the maximum marks have been allocated for a particular question, place an **M** 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: **X**
  - 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.

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.

TOTALLING AND TRANSFERRING OF MARKS

- Each subquestion must be totalled.
  - Questions in Section A has five sub-sections, therefore five subtotals per question is required. Section B has three sub-sections and three subtotals.
  - Sub-section totals to be written in the right-hand margin at the end of the subsection and underlined.
  - Subtotals must be written legibly.
  - Leave space to write in moderated marks of different levels.
- Total subtotals and transfer totals to top left-hand margin next to question number
- Transfer total to cover of answer book.

MODERATION

Marking on each level of moderation is done in the same way as the initial marking. All guidelines for marking must be adhered to.

If a mark for a subquestion is changed after moderation, the moderator must strike through the marker's mark and write down the new mark, ~~12~~ 16.

The total for the question must be recalculated, and similarly be struck off and the new total to be written down, ~~26~~ 36.

EXAMPLE FOR MARKING

QUESTION 1

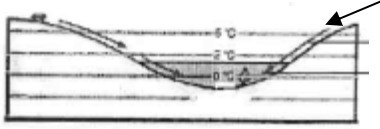
1.1 1.1.1 A (South Atlantic High) ✓
1.1.2 B (Kalahari High) ✓
1.1.3 B (South Indian) X 2

1.2 1.2.1 Melting snow ✓
1.2.2 Mouth X
1.2.3 Third order ✓ 2

1.3 1.3.1 Katabatic X

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 1.4.1 Shape of front concave X
Steep gradient of front ✓✓

1.4.2 Warm air undercuts the cold air X
✓✓

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. 5

1.5 1.5.1 (a) A river that only flows all year-round X
(b) The river channel is wide X
✓✓ ✓✓
(c) Regularity of rainfall and the soil type over which the streams flow.
✓ X

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 in electricity prices. Costs will increase the price of electricity during production. There will be less clean water to generate hydroelectricity. 7

SECTION A: RURAL AND URBAN SETTLEMENTS

QUESTION 1: RURAL 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 Which of the following is TRUE of dispersed settlements?

A They are found in high-density urban areas.
B Dwellings are built around churches and markets.
C **Dwellings are far apart from each other**
D People live in multi-story buildings.

1.1.2 In a dispersed settlement:

A population density is high.
B **residents are more vulnerable to crime.**
C there is greater social interaction between residents.
D there is often greater access to services.

1.1.3 What is a disadvantage of nucleated settlements?

A Greater access to services.
B Better community support.
C Large areas of land available for ownership.
D **Overcrowding and pollution.**

1.1.4 An advantage of dispersed settlements is:

A Centralised infrastructure.
B **Higher profits.**
C Easy access to services.
D High levels of social interaction.

1.1.5 Which of the following is a social advantage of nucleated settlements?

A Greater privacy.
B Isolation from others.
C **Increased community activities.**
D Slower service delivery.

1.1.6 A disadvantage of dispersed settlements is:

A **Limited access to schools and clinics.**
B Overcrowding.
C Spread of diseases.
D **High crime rates.**

1.1.7 A challenge in providing services to a dispersed settlement is:

A Too many people in one area.
B Lack of employment.
C **High cost of infrastructure development.**
D High building density.

1.1.8 Nucleated settlements are generally found in areas with…

A Harsh environmental conditions.
B Isolated homesteads.
C **A scarcity of arable land.**
D **A high population density.**

(8 x 1) (8)

1.2 Choose the correct term/concept in brackets to make the following statements TRUE. Write the answer next to the question numbers (1.2.1 to 1.2.7) in the ANSWER BOOK, e.g. 1.2.8 situation.

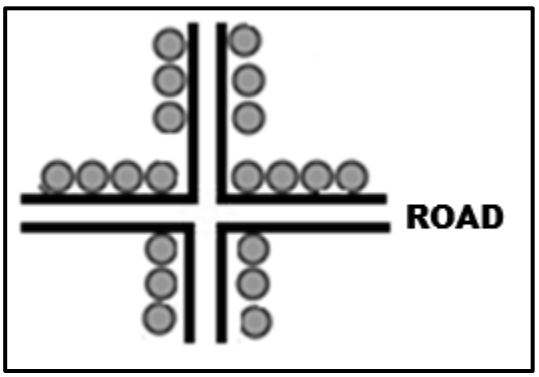
1.2.1 The (**physical location**/function) of a rural settlement is described as its site.

1.2.2 The (distance/**relationship**) between a rural settlement and its surroundings describes its situation.

1.2.3 (Trade route access/**Gentle relief**) is considered when describing the site of a rural settlement.

1.2.4 Low rainfall is considered a (site/**situation**) factor in a rural settlement.

Refer to the diagram below to answer QUESTIONS 1.2.5 to 1.2.7.



[Source: https://www.savemyexams.com/o-level/geography/]

1.2.5 The settlement shape shown in the diagram can be classified as (**crossroad**/T-shaped).

1.2.6 The main reason for the shape of the settlement is the intersection of (**transport routes**/power lines).

1.2.7 A benefit of the settlement shown is (**easy**/difficult) access from multiple directions.

(7 x 1) (7)

1.3 Refer to the extract on rural depopulation.

KEY PROBLEMS CAUSED BY RURAL DEPOPULATION

The standard of living in rural areas is declining. Businesses close and services become scarce, which forces people to leave rural regions.

It is also not uncommon for residents to complain about the lack of services, medical assistance and even bank branches. All this impoverishes (makes poorer) these municipalities and their residents.

Environmental repercussions occur when farmers, who have traditionally taken care of the countryside, no longer provide upkeep after they abandon their farms. This leads to the growth of bushes and vegetation, increasing the intensity of unexpected fires.

[Adapted from https://www.mapfre.com/en/insights/sustainability/rural-despopulation]

1.3.1 Define the term *rural depopulation*.

The (significant) decline in the population of rural areas, (often driven by factors such as urbanisation, economic opportunities, and changes in agricultural practices.) [CONCEPT] (1 x 2) (2)

1.3.2 Quote ONE consequence of rural depopulation from the extract.

"Businesses close" (2)
"… services start to become scarce ..." (2)
"…increasing the intensity of unexpected fires."
"The standard of living in rural areas is declining."
"… lack of services." (2)
"All this impoverishes (makes poorer) these municipalities and their residents." (2)
[ANY ONE] (1 x 2) (2)

1.3.3 Explain how the lack of service delivery can impoverish (to make poorer) municipalities.

Reduced revenue/income from providing municipal services (accept examples). (2)
Reduced revenue/income from municipal rates and taxes. (2)
Poor infrastructure decreases investment in municipality. (2)
Municipal employment opportunity is limited reducing the tax base. (2)
[ANY TWO] (1 x 2) (2)

1.3.4 Identify the natural hazard caused by the abandonment of farms.

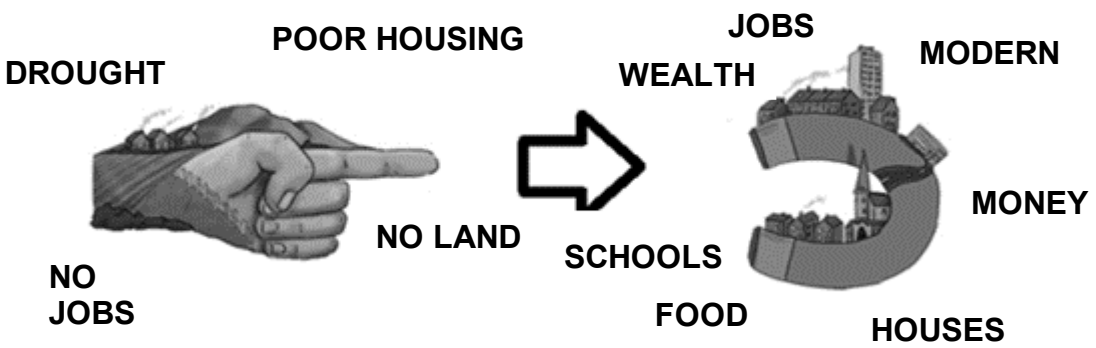
Veldfires. (1)
(Unexpected) Fires (1)
[ANY ONE] (1 x 1) (1)

1.3.5 In a paragraph of approximately EIGHT lines, discuss how the improvement of basic services by rural municipalities can assist in reducing rural depopulation.

Access to clean water/sanitation/electricity improves living standards in rural areas. (2)
Access to quality healthcare reduces the need to move to cities. (2)
Access to recreational facilities increases social interaction in rural areas. (2)
Upgrading/Maintenance of infrastructure can create employment opportunities in rural areas. (2)
Upgrading/Maintenance of infrastructure can attract investment in rural areas. (2)
Improving social amenities promotes social cohesion in rural areas. (2)
The provision of basic services promotes small-business growth. (2)
Agricultural production increases when basic services are provided. (2)
The provision of safety and security measures encourages people to remain in rural areas. (2)
[ANY FOUR] (4 x 2) (8)

1.4 Refer to the infographic

PUSH AND PULL FACTORS



RURAL DEVELOPMENT

"Many communities have received land through restitution and redistribution, but the success of these projects has been limited due to lack of training, poor infrastructure, and limited access to capital." – Department of Rural Development Report (2023)

[Source: https://mammothmemory.net/geography/geography-vocabulary/urban-issues-and-challenges/migration.html]

1.4.1 Identify a social pull factor evident in the sketch.

"Modern" (1)
"Schools" (1)
"Food" (1)
"Jobs" (1)
"Houses" (1)
"Wealth" (1)
"Money" (1)
[ANY ONE] (1 x 1) (1)

1.4.2 Identify an environmental push factor evident in the sketch.

"Drought" (1) (1 x 1) (1)

1.4.3 'NO LAND' is indicated as a push factor in the sketch. Define the term *land reform*.

Land reform is a programme aimed at redistributing land to address past injustices. [CONCEPT] (2) (1 x 2) (2)

1.4.4 Identify ONE type of land reform programme mentioned in the extract.

Land restitution (1)
Land redistribution (1)
[ANY ONE] (1 x 1) (1)

1.4.5 Explain how land reform will improve the lives of rural inhabitants.

Addresses historical injustice and inequality. (2)
Promotes economic development. (2)
Improvement living standards. (2)
Alleviate rural poverty. (2)
Promotes food security. (2)
Creates more employment opportunities. (2)
Improves rural infrastructure and services. (2)
Promotes social inclusion and empowerment. (2)
Promotes sustainable land use. (2)
Encourages environmental protection. (2)
[ANY TWO] (2 x 2) (4)

1.4.6 Explain why access to capital is required to ensure the success of land reform projects.

To develop infrastructure (accept examples). (2)
To purchase agricultural equipment (accept examples). (2)
To purchase seeds and fertilizer. (2)
To access markets. (2)
To implement modern farming methods. (2) (6)

To pay for operational costs (accept examples) (2)
To train new farmers. (2)
Improvement of research methods. (2)
Process will be quicker and more effective. (2)
New land owners can develop the land. (2)
Government can invest in training programmes to make land more productive. (2)
More land can be turned into commercial farms. (2)
Land available for development (accept examples) (2)
[ANY THREE] (3 x 2)

1.5 Refer to the article below on access to healthcare services in rural areas and answer the questions that follow.

BARRIERS TO HEALTHCARE IN RURAL AREAS

For many in rural South Africa, accessing healthcare is fraught with challenges. Clinics are often located hours away, requiring expensive or exhausting trips that many cannot afford. Even when patients do reach a clinic, they may be confronted with overburdened staff, long queues, and a rushed, impersonal experience.

This situation is particularly complex (difficult) in poor communities. Decades of systemic inequalities mean that many people are reluctant to question or approach healthcare providers in positions of authority.

This can lead to delayed care, incomplete health history and poor adherence to treatment plans – factors that can severely impact health.

[Adapted from https://bhekisisa.org/opinion/2025-01-29-rural-areas-need-these-health-workers-so-does-the-nhi/]

1.5.1 According to the article, why is access to healthcare services in rural areas a challenge?

Clinics are often located hours away. (1)
Requires expensive/long trips. (1)
Long queues. (1)
Overburdened staff. (1) (1 x 1) (1)

1.5.2 Describe the conditions at the healthcare facilities in rural areas according to the article.

The staff at the clinics are overburdened. (2)
Long queues waiting to be helped. (2)
[Any ONE] (1 x 2) (2)

1.5.3 Why are the challenges of healthcare services in rural areas not addressed, according to the article?

(2)

After decades of systemic inequalities, many people are reluctant to question or approach healthcare providers in positions of authority. (1 x 2)

1.5.4 Describe the impact of the barriers to healthcare services in rural areas on the local population.

Late diagnosis and treatment will give rise to diseases that can worsen (2)
Increases the risk of complications or death (2)
Without regular check-ups, vaccinations, maternal care and preventable illnesses become more common (2)
When people remain ill for long, they miss work or cannot work effectively, and families may lose income and fall deeper into poverty (2)
Increased pregnancy complications, premature births and infant deaths (2)
Spread of disease (2)
Untreated stress, depression and anxiety become more widespread (2)
Increase in unlicensed healthcare practitioners. (2)
Delayed care (2)
Incomplete care (2)
Non-adherence to treatment plans (2)
Healthcare will cost more money (2)
[Any ONE] (1 x 2) (2)

1.5.5 Discuss the economic impact of poor healthcare on rural communities.

Loss of jobs. (2)
Poverty/Decrease in quality of life. (2)
Missed days at work due to illness. (2)
(Agricultural) production will decrease. (2)
Businesses may close. (2)
People will have to spend money on private healthcare. (2)
[Any TWO] (2 x 2) (4)

1.5.6 Suggest strategies that government can implement to increase access to healthcare in rural areas.

Provide transportation. (2)
Build facilities closer to communities/Mobile clinics. (2)
Build more healthcare facilities. (2)
Subsidise healthcare in rural areas. (2)
Provide skilled medical staff. (2)
Incentives for healthcare workers. (2)
[Any TWO] (2 x 2) (4)
[60]

QUESTION 2: URBAN SETTLEMENTS

2.1 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 (2.1.1 to 2.1.8) in the ANSWER BOOK, e.g. 2.1.9 A.

2.1.1 The increase in the number of people living in urban areas is known as:

A Urban expansion
B Urbanisation
C Rural urban migration
D **Urban growth**

2.1.2 The speed at which urbanisation occurs, is known as:

A **Rate of urbanisation**
B Counter urbanisation
C Level of urbanisation
D Urban growth

2.1.3 The ranking of urban settlements from the smallest to the largest is called:

A Urban sprawl
B Urban levels
C **Urban hierarchy**
D Urban order

2.1.4 …refers to the number of people living in urban areas.

A Urbanisation
B **Level of urbanisation**
C Rate of urbanisation
D **Urban growth**

2.1.5 The growth of a city beyond its existing boundaries, where rural areas are converted into built-up urban spaces, is called:

A Urban issues
B Urban migration
C Urban growth
D **Urban expansion**

2.1.6 Urban sprawl refers to the …, outward spread of cities into … areas

(i) planned
(ii) unplanned
(iii) suburban
(iv) rural

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

2.1.7 … refers to an increasing percentage of people living in urban areas, due to …

(i) Rural-urban migration
(ii) Urbanisation
(iii) natural growth
(iv) natural decline

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

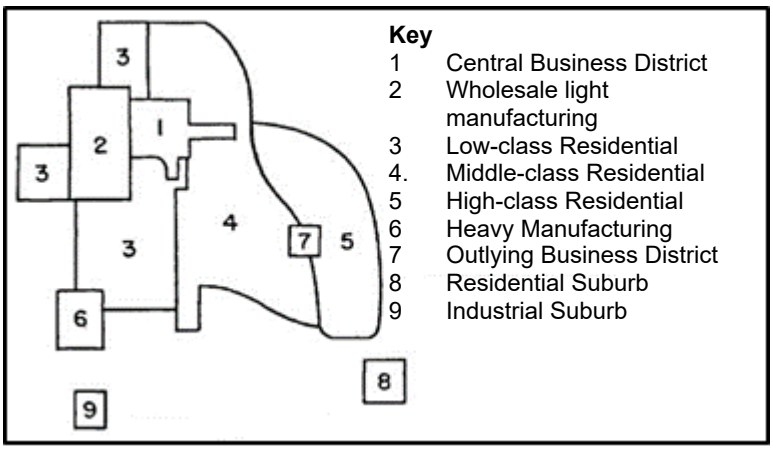
2.1.8 The movement of people and activities from urban to rural areas is known as:

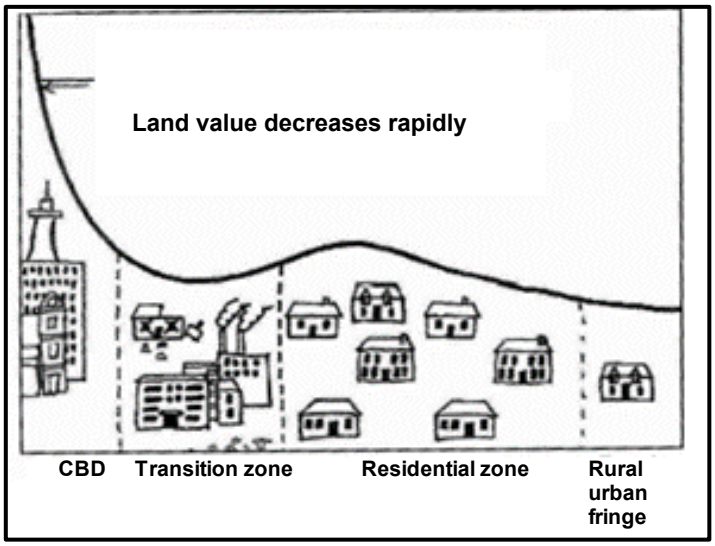
A Urbanisation.
B **Counter-urbanisation.**
C Rural-urban migration.
D Urban growth.

(8 x 1) (8)

2.2 Choose a term from COLUMN B that matches the diagram COLUMN A. Write only **Y** or **Z** next to the question numbers (2.2.1 to 2.2.7) in the ANSWER BOOK, e.g. 2.2.8 Y.

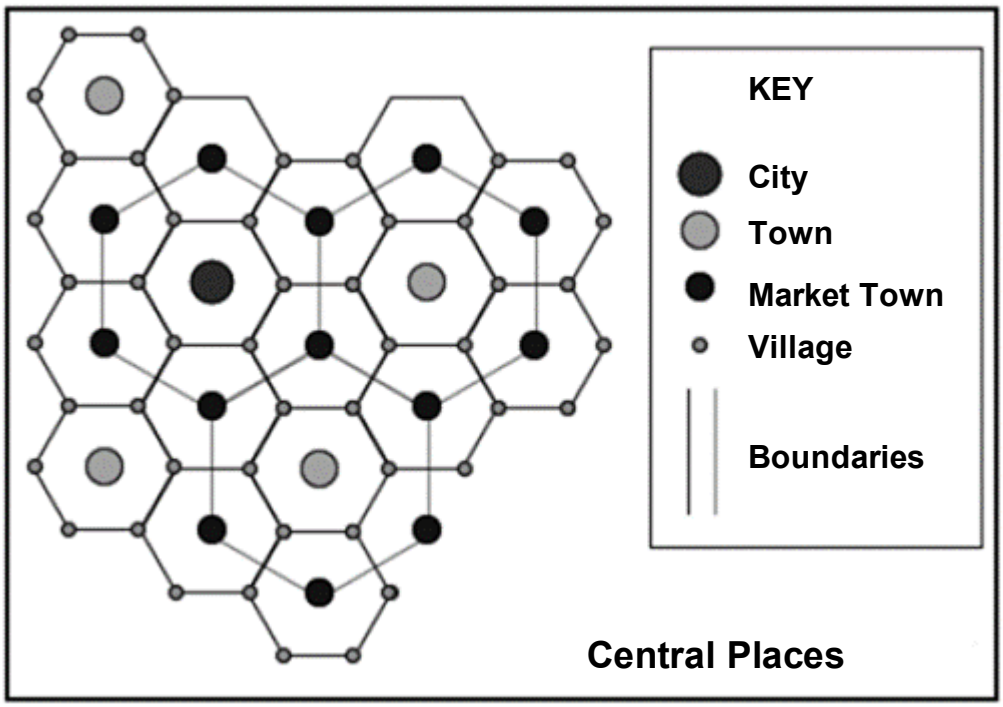
COLUMN A	COLUMN B
2.2.1 The land-use zone below:  **[Source: https://www.ingonyamatrust.org.za/real-estate/]**	**Y residential zone** **Z** transition zone
2.2.2 The building density in the land-use zone below is high.  **[Source: https://www.jll.com/en-us/insights/market-dynamics/commercial-real-estate-in-south-africa]**	**Y** industrial land-use zone **Z commercial land-use zone**
2.2.3 A characteristic of the land-use zone below:  **[Source: https://www.snl24.com/dailysun/news/gallery-the-state-of-johannesburgs-decaying-buildings-20231116]**	**Y** low crime rates **Z mixed land uses**

2.2.4 The street plan below limits traffic congestion.  **[Source: Extract from topographic mag 2530 BD Mbombela]**	**Y Irregular** Z Gridiron
2.2.5 A reason for the development of the shopping centre in the suburbs:  **[Source: https://ultrashort.info/R2mELm]**	**Y lower land values** **Z** higher land values
2.2.6 The urban structure model below:  **[Source: https://ultrashort.info/vnGaQ9]**	**Y** Third World City **Z Multiple nuclei**

2.2.7 The longitudinal profile of a city below is a … view of the city.  **[SOURCE: Adapted from: https://ultrashort.info/ZbpGY6]**	**Y** plan **Z side**

(7 x 1) (7)

2.3 Refer to the diagram below to answer the questions that follow.



[Source: http://www.watd.wuthering.co.uk]

2.3.1 Define a *central place*.

Central place is the urban area that provides goods and services to the surrounding rural settlements. (2) (Concept) (1 x 2) (2)

2.3.2 A person living in a village will buy low-order goods in the (city/ market town).

Market town. (1) (1 x 1) (1)

2.3.3 Give a reason for your answer to QUESTION 2.3.2.

Low-order goods are cheap goods bought frequently and require short distance to access them. (2)
Market town is closest to the village ideal to access low-order goods. (2)
Market town will have a shorter range. (2)
[ANY ONE] (1 x 2) (2)

2.3.4 Compare the threshold population of a city with that of a town.

A city has a bigger threshold population than a town. (2)

OR

A town has a smaller threshold population than a city. (2) (1 x 2) (2)

2.3.5 Explain the relationship between the size of central places and the number of central places, as shown in the diagram.

There are more small central places than larger central places/there are fewer large central places than smaller ones.(2)
The smaller the central place the higher the frequency(number) and the bigger the central place the smaller the number.(2)
[ANY ONE] (1 x 2) (2)

2.3.6 Evaluate the economic importance of low-order centres.

Low order centres provide daily goods and services cheaper, and people save money. (2)
Low order centres have a shorter range and transport money is saved.(2)
Low order centres are easily accessible and save time and money.(2)
[ANY ONE] (1 x 2) (2)

2.3.7 Suggest TWO reasons why it is important for the high-order centre to have a bigger sphere of influence.

High order centres provide more goods and services, and they require more customers to remain profitable. (2)
There are more goods and services from high order centres , and they require more people to be sustainable. (2)

A big sphere of influence will provide more customers, and more profit will be gained which is important for the sustainability of business. (2)
High order centres offer expensive goods and services. (2)
[ANY TWO] (2 x 2) (4)

2.4 Refer to the infographic below and answer the questions that follow.

INSIDE JOHANNESBURG'S URBAN CRISIS: FROM ECONOMIC HUB TO CITY IN DECAY

By the time the Group Areas Act and influx control were completely abolished, hundreds of thousands of people migrated to the cities, resulting in rapid urbanisation which led to urban blight as experienced in most South African cities. With rapid urbanisation came overcrowding. Additionally, urbanisation can indirectly affect society by contributing to health problems due to pollution and food shortages. Hillbrow, a part of Johannesburg's Central Business District (CBD), has experienced significant urban decay, marked by crumbling infrastructure and high crime rates. Once a vibrant and glamorous area, it has become synonymous with poverty, grime, and a sense of chaos.





[Adapted from https://iol.co.za/news/2025-01-04-inside-johannesburgs-urban-crisis-from-economic-hub-to-city-in-decay/#google_vignette]

2.4.1 Identify the urban issue referred to in the infographic.

Urban decay/Urban blight. (1) (1 x 1) (1)

2.4.2 According to the extract, what is the main cause of the urban issue identified in QUESTION 2.4.1?

(Rapid) urbanisation. (1)
Influx control. (1)
Abolishment of Group Areas Act. (1)
[Any ONE] (1 x 1) (1)

2.4.3 Identify a social impact of the urban issue from the infographic.

Crime (1)
Poverty (1)
Chaos (1) (1)

Overcrowding (1)
Food shortages (1)
Health problems (1)
[Any ONE] (1 x 1)

2.4.4 Explain the impact of overcrowding on the sustainability of cities.

Pressure on available services such as electricity, refuse removal and water (2)
Increased level of pollution (2)
Shortage of houses (2)
Insufficient job availability (2)
Damage to infrastructure (2)
Inadequate infrastructure maintenance (2)
Development of informal settlement/slums (2)
Over reliance on informal sector, and loss of revenue (2)
Increase in crime/social ills (2)
Illegal occupation/Hijacking of buildings (2)
[Any ONE] (1 x 2) (2)

2.4.5 Evaluate the impact of the urban issue identified in QUESTION 2.4.1 on the economic development of a city, e.g., Johannesburg.

Businesses will relocate to safer areas. (2)
Less job opportunities results in reduced income. (2)
Increase in crime reduces economic opportunities. (2)
Fewer tourists visiting the city and loss of foreign income. (2)
(Businesses will spend) more money spent on safety and security and therefore less profits will be made. (2)
Tenants will move out and landlords will lose out on rental income. (2)
Landlords may be forced to reduce rental amounts to attract tenants and therefore less profit margins. (2)
Reduction of foreign investment and reduction of income. (2)
Drop in city rankings reduces income. (2)
Most of the city's budget will be spent on urban renewal which reduces the city's revenue (2)
[ANY TWO] (2 x 2) (4)

2.4.6 Suggest strategies that city municipalities can implement to make cities sustainable for businesses and people.

Improve (transport) infrastructure (accept examples) (2)
Improve safety by employing well trained patrollers to fight crime. (2)
Improve police visibility in cities. (2)
Involve communities in discussions about the problems they are facing daily. (2)
Use GIS to identify high crime zones and intensify patrol in identified areas. (2)
Enforce city by-laws. (2) (6)

Demolition of old and abandoned buildings used by criminals. (2)
Repurpose old buildings that can still be used. (2)
Strategies like gentrification and chelseafication for old and dilapidated buildings. (2)
Facadism of buildings with architectural sentiments. (2)
Encourage counter-urbanisation to reduce pressure on urban areas. (2)
Creating partnerships between public and private sectors. (2)
[ANY THREE] Must refer to businesses and people. (3 x 2)

2.5 Refer to the infographic below and answer the questions that follow.

The City of Tshwane has reduced the number of days it supplies water to 168 informal settlements in Mamelodi. Mayco member for Human Settlements, Aaron Maluleka, announced that as of 1 August, the supply was reduced from daily to four days a week.

Water will be available on Mondays, Wednesdays, Fridays, and Saturdays "until further notice", said Maluleka.





[Source: https://groundup.org.za/article/tshwane-reduces-water-truck-deliveries-to-informal-settlements/]

2.5.1 Define an *informal settlement*.

Areas where groups of housing units have been constructed on land that the occupants have no legal claim to, or occupy illegally (2) [Concept] (1 x 2) (2)

2.5.2 Identify the lack of service mentioned in the article.

Lack of water supply (1) (1 x 1) (1)

2.5.3 Name TWO challenges, from the infographic (photo), that the people experience with the lack of service mentioned in QUESTION 2.5.2.

Carry water in buckets (1)
Waiting for water (1)
Fetch water that is made available in tanks (1)
Carry water for (long) distances (1)
[Any TWO] (2 x 1) (2)

2.5.4 Describe the negative impact of the lack of the service, mentioned in QUESTION 2.5.2, on the health of the inhabitants of this settlement.

Can lead to waterborne diseases (2)
Poor personal hygiene due to limited water for washing which will increase the spread of infections (2)
Inadequate sanitation and inability to clean toilets or waste areas which causes a build-up of germs (2)
Decline in community health affects children, the elderly, and vulnerable groups (2)
[Any ONE] (1 x 2) (2)

2.5.5 In a paragraph of approximately EIGHT lines, suggest measures the local government can implement to improve service delivery in informal settlements.

Provide basic infrastructure such as clean water points, communal taps, and proper sanitation facilities (2)
Upgrade roads and footpaths to allow access to emergency services, waste collection, and public transport (2)
Install electricity connections or safe alternative energy sources to reduce illegal and dangerous connections (2)
Improve waste management by providing regular refuse collection and designated waste-disposal areas (2)
Develop proper drainage systems to reduce flooding, stagnant water, and associated health risks (2)
Implement housing-upgrade programmes such as providing serviced sites or incremental housing support (2)
Strengthen community participation by involving residents in planning and decision-making for services (2)
Increase policing and safety measures to create a secure living environment (2)
Establish mobile clinics or health outreach services to improve access to healthcare (2)
Enhance coordination between government departments to ensure integrated and efficient service provision (2) (4 x 2) (8)

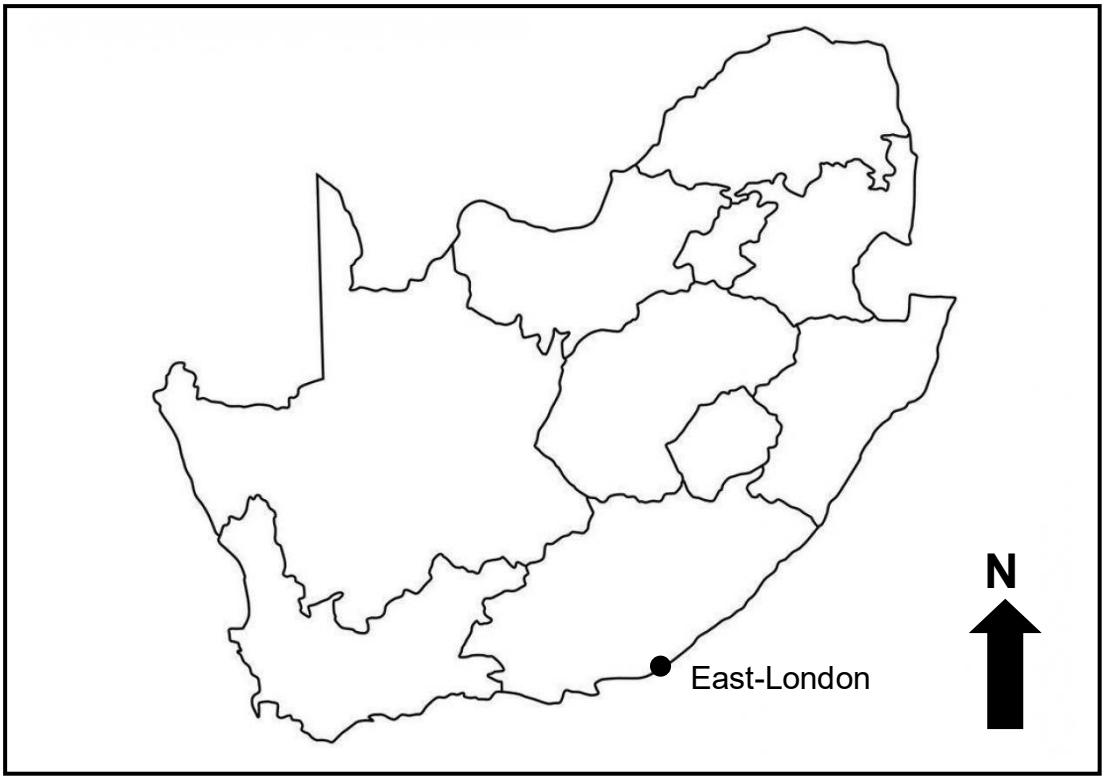
[60]

TOTAL FOR SECTION A: 120

SECTION B

QUESTION 3: GEOGRAPHICAL SKILLS AND TECHNIQUES

BACKGROUND INFORMATION ON EAST LONDON



Coordinates: 33°01′03″S; 27°54′17″E

East London (eMonti) is a coastal city in the Eastern Cape, located between the Buffalo and Nahoon Rivers along the Indian Ocean. The city features wide streets, a subtropical climate, and is a hub for fishing, manufacturing, and transport, connecting to the Free State via rail.

The coastal Eastern Cape region can probably lay claim to being the birthplace of motorsport in South Africa and the first home of the Formula One Grand Prix (motor racing).

Water sports, dolphin watching, hiking, and cycling are popular activities. Nearby game reserves offer wildlife experiences, and attractions like the East London Museum and Aquarium which provide educational value. It's natural beauty, historic port, and tourism offerings make East London a key economic and recreational centre in South Africa's southeast.

[Source: Examiners adaption from https://www.eastern-cape-info.co.za/provinces/town/580/east-london; https://www.britannica.com/place/East-London]

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

ENGLISH	**AFRIKAANS**
Sewerage works	Rioolwerke
College	Kollege
Rifle Range	Skietbaan
Diggings	Uitgrawings

3.1 MAP SKILLS AND CALCULATIONS

Refer to the topographical map and the orthophoto map.

3.1.1 MAP SKILLS AND CALCULATIONS

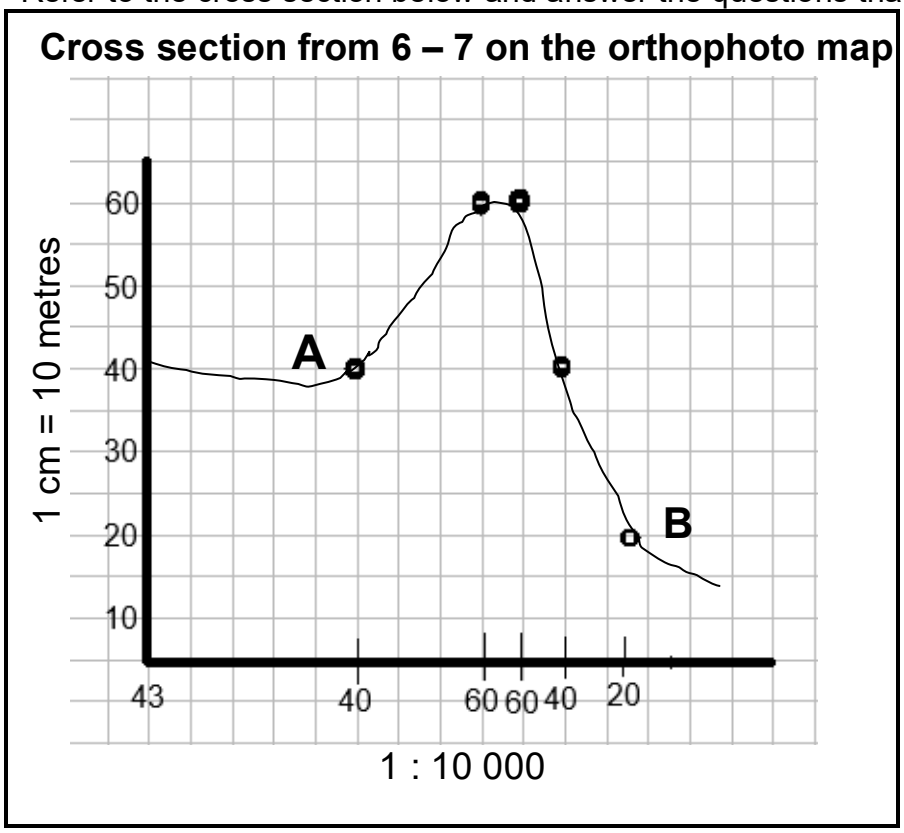
East London is situated in:

A Northern Cape.
B Southern Cape.
C Eastern Cape.
D Western Cape. (1 x 1) (1)

3.1.2 The straight-line distance from trigonometrical beacon 63 (**F**) in block **D2** to spot height 49 (**G**) in block **C1** is …

A 2,6 km.
B 2 600 m.
C 13 km.
D 1,3 km. (1 x 1) (1)

3.1.3 Refer to the cross section below and answer the questions that follow:



(a) Calculate the vertical exaggeration of the cross-section.

FORMULA: $\frac{\text{VERTICAL SCALE}}{\text{HORIZONTAL SCALE}}$

$\frac{\text{1 cm = 10 metres}}{\text{1 : 10 000}}$

$\frac{\text{1 : 1000 (1)}}{\text{1 : 10 000}}$ **Correct substitution (1)**

$\frac{1}{1\,000}$ **(1) X** $\frac{10\,000}{1}$ **(1)**

10 times (1)

OR

$\frac{\text{1 cm = 10 metres}}{\text{1 : 10 000}}$

$\frac{\text{1 : 10}}{\text{1 : 100}}$ **(1) Correct substitution (1)**

$\frac{1}{10}$ **(1) X** $\frac{100}{1}$ **(1)**

10 times (1) (5 x 1) (5)

(b) Will **B** be visible from **A** on the cross-section?

No (1) (1 x 1) (1)

(c) Give a reason for your answer to QUESTION 3.1.3 (b).

There is a koppie/hill/obstacle in the way (2) (1 x 2) (2)

3.2 MAP INTERPRETATION

3.2.1 Identify the man-made feature found at **H** in block **B3** on the topographical map.

A Industrial area
B River
C Refuse dump
D Mixed-use development (1 x 1) (1)

3.2.2 East London can be classified as a … type of settlement.

A central place
B gateway town
C break of bulk settlement
D junction town (1 x 1) (1)

3.2.3 (a) Can the East London Grand Prix Circuit (motor racing) be considered a high-order or low-order activity?

High-order activity (1) (1 x 1) (1)

(b) Give a reason for your answer in QUESTION 3.2.3 (a)

Hosts infrequent events (races, motorsport festivals, national/international competitions). (2)
Draws spectators, participants, and businesses from across the region and even nationwide (requires a large threshold population.) (2)
Requires a large range/People are willing to travel far. (2)
Requires large infrastructure, sponsorship, and a sizeable population to remain viable. (2)
Is not an everyday-use service for local residents. (2)
It is an expensive sport. (2)
[Any ONE] (1 x 2) (2)

(c) Provide evidence from the topographic map for the suitable location of the motor racing circuit in block **B2.**

Gentle relief/flat land. (2)
Open space available. (2)
Good road access. (2) (2)

Close to airport. (2)
Limited nearby housing. (2)
Space available for future expansion. (2)
Good drainage required. (2)
[Any ONE] (1 x 2)

3.2.4 Refer to the orthophoto map and identify the line feature at **8**.

Railway line (1) (1 x 1) (1)

3.2.5 Describe the negative environmental impact of the industrial region at **I** in block **B3**.

Pollution of the Buffalo River (2)
Pollution (accept examples) (2)
Increased Urban Heat Island effect (2)
[Any ONE] (1 x 2) (2)

3.2.6 Name the land-use zone at **9** on the orthophoto map.

Residential land-use zone (1) (1 x 1) (1)

3.2.7 Give a reason for the choice of site of the land-use zone at **9** on the orthophoto map.

Flat land (1)
Accessibility to the industrial area for work opportunities (1)
Accessibility to main roads (1)
[Any ONE] (1 x 1) (1)

3.3 GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

3.3.1 A GIS data base consists of raster and vector data.

(a) Differentiate between *raster* and *vector* data.

Raster data – makes use of pixels or cells in a graphic design as rows and columns (1) [Concept]
Vector data – coordinates based and is represented by points, lines and polygons (1) [Concept] (2 x 1) (2)

(b) Would you classify the orthophoto map as *raster* or *vector* data?

Raster (1) (1 x 1) (1)

3.3.2 Refer to block **A5** on the topographic map.

Determine whether the following features are a point, line, or polygon.

(a) A row of trees

Line (1) (1 x 1) (1)

(b) The stadium

Polygon (1) (1 x 1) (1)

3.3.3 Define the term *spatial resolution*.

Spatial resolution is the amount of detail that a satellite image or aerial photo shows.
It refers to the smallest object or area on the ground that can be seen or identified in the image.
[Concept] (2) (1 x 2) (2)

3.3.4 Give the attribute data of the river in block **B2** on the topographic map.

Name of the river/Buffalo River (1)
Permanent/Perennial river. (1)
Flows eastwards. (1)
Lower course. (1)
[Any ONE] (1 x 1) (1)
[8]

TOTAL SECTION B: [30]

TOTAL: 150