GAUTENG PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

GAUTENG DEPARTMENT OF EDUCATION

PREPARATORY EXAMINATION

2021

MARKING GUIDELINES

GEOGRAPHY (PAPER 2) (10782)

12 pages

SECTION A

QUESTION 1: SETTLEMENT GEOGRAPHY

1.1 1.1.1 ***Central place (1)***

1.1.2 ***Gateway (1)***

1.1.3 ***Break-of-bulk (1)***

1.1.4 ***Trade and transport (1)***

1.1.5 ***Specialised (1)***

1.1.6 ***Junction (1)***

1.1.7 ***Specialised (1)*** (7 x 1) **(7)**

1.2 1.2.1 ***C - village(1)***

1.2.2 ***C – conurbation / D - metropolis (1)***

1.2.3 ***C – megalopolis (1)***

1.2.4 ***B – Conurbation (1)***

1.2.5 ***A – isolated farmstead (1)***

1.2.6 ***B – town (1) (also accept D – city only due to the typing mistake)***

1.2.7 ***B – village (1)***

1.2.8 ***D – hamlet (1)*** (8 x 1) **(8)**

1.3 1.3.1 Identify the rural settlement issue illustrated in FIGURE 1.3

Rural-urban migration (1) (1 x 1) (1)

1.3.2 State a pull factor that causes this rural settlement issue mentioned in QUESTION 1.3.1

Access services (1)
Better job opportunities (1) / better paying jobs (1) / higher salaries (1)
Better facilities/services (can give examples): education, healthcare, sanitation, piped water, housing, places of worship, entertainment and recreation (1)
Better transport links (1)
Hope for a better quality of life / better standard of living (1)
[Any ONE] (1 x 1) (1)

1.3.3 Identify the solution to the rural settlement issue illustrated in FIGURE 1.3.

Urban-rural migration (1) /People moving back to rural areas (1) / Counter urbanisaion (1) (examples accepted) (1 x 1) (1)

1.3.4 Explain the negative economic impact of this rural settlement issue mentioned in QUESTION 1.3.1 for a rural area.

Decline in wage earners therefore decreased buying power. (2)
Dwindling population results in shops closing down, decreasing staff or reducing stock. (2)
Facilities close. (can give examples) (2)
Land value drops. (2)
Younger and more productive people leave, resulting in an ageing population, resulting in a decrease in productivity of the area (2)
Ghost towns could develop. (2)
Cycle of rural decline and decay sets in (2) / circle of poverty (2)
Decrease in use of resources in rural areas, resources not used to develop economy.(2)
Decrease in economic growth (2)
[Any TWO] (2 x 2) (4)

1.3.5 In a paragraph of approximately EIGHT lines, explain strategies that government can implement to encourage this solution mentioned in QUESTION 1.3.3.

Create more job opportunities in rural areas. (Accept examples of creation of jobs) (2)
Improve infrastructure in rural areas. (Can give examples) (2)
More and improved basic services in rural areas. (Can give examples) (2)
Create incentives / initiatives to encourage investment in rural areas. (Can give examples) (2)
Industrial decentralisation to create more job opportunities (2)
More and improved basic facilities in rural areas. (Can give examples) (2)
Skills development in rural areas to generate a higher income (2)
Encourage more businesses to move to rural areas. (2)
Education based on development of people in rural areas (2)
Government can introduce land reform strategies to give people easier access to land (2) (accept examples of land reform strategies) / Rural land reorganisation to improve productivity (2)
Support upcoming and subsistence and small scale farmers (2)

[Any FOUR] (4 x 2) (8)

1.4 Read the article in FIGURE 1.4 on poor service delivery.

1.4.1 Identify a basic service lacking in Lichtenburg that forced Clover to make the decision to move the cheese factory.

Roads (1)
Sewerage (1)
(Intermittent) electricity (1)
(Intermittent) water supply (1)
(Any ONE) (1 x 1) (1)

1.4.2 Give TWO possible causes for poor service delivery in a town like Lichtenburg.

Poor management by municipalities (2)
Corruption by municipal officials (2)
Incompetent municipal officials (2)
Lack of money from (non) paying inhabitants (2)
Financial challenges (2)
[Any TWO] (2 x 2) (4)

1.4.3 Describe the social impact of the relocation of Clover from Lichtenburg to Durban on the inhabitants of Lichtenburg.

Inhabitants will lose their jobs. (2)
Poverty will increase. (2)
Crime will increase. (2)
Disruption of family units (2) – workers relocated (2)
Inhabitants have to travel longer distances to be able to get hold of products – increase in poverty (2)
Reduction in access to social programmes provided by company is withdrawn (2)
[Any TWO] (2 x 2) (4)

1.4.4 Explain strategies that can be put in place to improve service delivery in Lichtenburg.

Encourage inhabitants to pay for service delivery on time. (2)
Community projects to fix roads and fill the potholes. (2)
Change in management in the municipalities. (2)
Report poor service delivery. (2)
Getting rid of corruption. (2)
Stricter budgeting measures in place by municipalities. (2)
Upskilling and capacitation of municipality officials (2)
Reliable census data of community (2)
[Any THREE] (3 x 2) (6)

1.5 Study FIGURE 1.5 showing an image of an informal settlement.

1.5.1 Define the concept *informal settlement.*

Any form of housing, shelter, or settlement (or lack thereof) where a person does not have legal claim to a piece of land, and which falls outside of government control or regulation. (2)
[CONCEPT] (1 x 2) (2)

1.5.2 The settlement illustrated in FIGURE 1.5 is informal. Give a piece of evidence from the photograph to support this statement.

No proper building structures (1)
No permanent structures (1)
Temporary structure (1)
Cheap material for structures (can give examples) (1)
Poor transport infrastructure (1)
No powerlines/electricity (1)
No proper roads (1)
[Any ONE] (1 x 1) (1)

1.5.3 Describe TWO social problems with living in informal settlements.

Overcrowding (2)
Less privacy (2)
Increase in crime (2)
Limited access to basic services (2) (Can give examples)
Increase in social challenges (Can give examples) (2)
Lack of emergency services (2)
[Any TWO] (2 x 2) (4)

1.5.4 In a paragraph of approximately EIGHT lines, explain how municipalities could improve the living conditions of people residing (living) in the informal settlement.

Provision of basic services. (Can give examples) (2)
Create opportunities for employment. (2)
Create institutions for skills development in communities. (2)
Better sanitation e.g. mobile toilets. (2)
Increase and improve facilities. (Can give examples) (2)
Educate people with regards to creating healthy living. (Can give examples) (2)
Improve transport infrastructure to create accessibility for emergency services. (2)
Provision of RDP houses (program) / formal houses to people living in an informal settlement (2)
Allocation of land for houses by the municipality (2)
Improving social programmes in informal settlements (2) (Accept examples.)
[Any FOUR] (4 x 2) (8)

[60]

QUESTION 2

2.1 2.1.1 ***Bridge industries (1)***

2.1.2 ***Raw material industries (1)***

2.1.3 ***Heavy industries (1)***

2.1.4 ***Ubiquitous industries (1)***

2.1.5 ***Footloose industries (1)***

2.1.6 ***Light industries (1)***

2.1.7 ***Market orientated industries (1)*** (7 x 1) **(7)**

2.2.1 ***D – Gross Domestic Product (1)***

2.2.2 ***H – Secondary sector(1)***

2.2.3 ***F – Gross National Products(1)***

2.2.4 ***C – Quaternary services (1)***

2.2.5 ***A – Economic trade (1)***

2.2.6 ***I – Raw materials (1)***

2.2.7 ***G – Tertiary sector (1)***

2.2.8 ***E – Balance of trade (1)*** (8 x 1) **(8)**

2.3 Refer to the newspaper article in FIGURE 2.3 on food security in South Africa.

2.3.1 Define the term *food security.*

Food security is when citizens of the country have access to sufficient, nutritious food. (2)
(CONCEPT) (1 x 2) (2)

2.3.2 Identify a climatic challenge (problem) indicated in FIGURE 2.3 that reduces food security.

Climate Change (1) (1 x 1) (1)

2.3.3 Explain how lack of jobs decreases food security.

No money/lack of money to buy nutritious food. (2)
Less taxes for government to use on projects to improve food security. (2) (2 x 2) (4)

2.3.4 Some of the food products shown in FIGURE 2.3 have been genetically modified (foods produced from organisms that have had changes introduced into their DNA using the methods of genetic engineering). Explain how genetically modified foods promote food security.

It has a longer shelf life. (2)
Is more resistant to climatic conditions. (2)
Bigger food product. (2)
Crops are more resistant to diseases/pests/viruses. (2)
[Any TWO] (2 x 2) (4)

2.3.5 Small-scale farming is considered by government as a solution to food insecurity. Give TWO reasons to support this statement.

Creates employment (2)
Contributes food to local communities (2)
Able to grow food for themselves (2)
Contributes to more food in the local market and leads to lower food prices (2)
Prioritises food production (2)
[Any TWO] (2 x 2) (4)

2.4 Refer to the case study on South Africa's coal in FIGURE 2.4.

2.4.1 The coal reserves in South Africa were (increasing/decreasing) from 2011 to 2019.

Decreasing (1) (1 x 1) (1)

2.4.2 Quote evidence from the map which indicates that transport is becoming a challenge to the coal mining industry.

"*railway capacity constraints hindering the transportation of coal*"(1)
(1 x 1) (1)

2.4.3 Give evidence from the article which emphasises the negative impact of coal mining on the environment.

Contamination of water through sulphur content (1)
Emission of greenhouse gases through electricity generation (1)
[Any ONE] (1 x 1) (1)

2.4.4 Discuss the significance of coal mining on the economy of the country.

Provision of employment (2)
Production of electricity (2)
Improves infrastructure (2)
Brings in foreign investment (2)
More taxes for government (2)
(Any TWO) (2 x 2) (4)

2.4.5 In a paragraph of approximately EIGHT lines, explain the social challenges that will be experienced if the trend mentioned in QUESTION 2.4.1 continues.

Loss of job opportunities (2)
Increases food insecurity (2)
Increases poverty (1)
Disruption in electricity supply due to load shedding (2)
Coal depletions push up electricity prices (2)
[Any FOUR] (4 x 2) (8)

2.5 Refer to FIGURE 2.5, showing a core industrial region in South Africa.

2.5.1 Name the core industrial region located in the province depicted on the map.

South Western Cape (1) (1 x 1) (1)

2.5.2 Identify TWO industries from FIGURE 2.5 that are related to agriculture.

Fruit packing (1)
Wine production (1)
Clothing factory (1)
[Any TWO] (2 x 1) (2)

2.5.3 How does the harbour contribute to the development of the core industrial region, mentioned in QUESTION 2.5.1?

Links the area with the rest of the world. (2)
Allows cheaper imports. (2)
Increases profits on exports. (2)
Encourages investment in the area. (2)
[Any TWO] (2 x 2) (4)

2.5.4 Explain how lack of mineral raw materials negatively impacted industrial activities in the core industrial region mentioned in QUESTION 2.5.1.

Increases costs as they have to get raw materials from other areas (2)
Limits the types of industries in the area (2)
Disrupts production due to delays in obtaining raw materials (2)
[Any TWO] (2 x 2) (4)

2.5.5 Explain how the core industrial region, mentioned in QUESTION 2.5.1, positively impacted the economic development of Western Cape province.

More job opportunities were created. (2)
Increase in employment created a larger local market for goods. (2)
More money was generated in the region which means more money was spent at local businesses. (2)
More investments from outside the region is an economic injection for the region. (2)
The Western Cape province has more money to improve infrastructure and/or services. (2)
[Any TWO] (2 x 2) (4)

[60]

TOTAL SECTION A: 120

SECTION B QUESTION 3

3.1 3.1.1 ***B – Southwest (1)***

3.1.2 ***D – 32˚59' 54''S; 17˚54' 12'' E (1)***

3.1.3 ***D – 243˚(1)*** (3 x 1) (3)

3.1.4 Calculate the area of **5** on the orthophoto map in m².

Formula: length x breadth

1,5 cm (1) x 1 cm (1) ***[Range: (1,4 to 1,6) x (0,9 to 1,1)]***
150 m (1) x 100 m (1) ***[140m to 160m] x [90m x 110m]***
15 000 m² (1) ***[12 600 m² - 17 600 m²]***
(5 x 1) (5)

(Correct placement of length (longer side) and breadth (shorter side) is compulsory.)

3.1.5 Which gradient is steeper, 1:10 or 1:90? Give a reason for your answer.

1:10 (1)
For every 10 units you move horizontally, there is an increase of 1 unit vertically (1) (2 x 1) (2)

3.2 Refer to the topographical map and the orthophoto map to answer the following questions.

3.2.1 Refer to the topographic map and the general information on Saldanha Bay.

(a) Is the Saldanha Bay IDZ situated on the east or west coast?

West coast (1) (1 x 1) (1)

(b) Identify the topography factor that influenced the site of the Saldanha Bay IDZ.

Flat/gentle land (1) (1 x 1) (1)

(c) Explain the impact that ONE of these site factors had on the economic growth of Saldanha Bay.

Flat/gentle land, cheaper to construct infrastructure (2)
Easier to construct infrastructure (2)
Easier to expand (2)
[Any ONE] (1 x 2) (2)

(d) Explain how environmental impacts caused by the development of the Saldanha Bay IDZ affects the inhabitants of Saldanha Bay.

More pollution (air/land) will occur resulting in health problems (2)
(example of health problems)
People will suffer from respiratory problems. (2)
The natural environment will be destroyed by building of infrastructure, resulting in less aesthetic appeal. (2)
Water quality and the influence of that on inhabitants (2)
(Candidates can refer to human and natural inhabitants)
[Any ONE] (1 x 2) (2)

3.2.2 Refer to blocks **A3** and **A4**.

(a) The major land-use zone in block **A3** is the (rural-urban fringe/transition zone).

Rural-urban fringe (1) (1 x 1) (1)

(b) State an agricultural activity that is found in the land-use zone mentioned in QUESTION 3.2.2 (a).

Crop farming (1) (1 x 1) (1)

(c) Explain the location of the land-use zone mentioned in QUESTION 3.2.2 (a).

Located on the outskirts of Saldanha Bay (2) (1 x 2) (2)

(d) Suggest a reason for the situation of the sewage works in the land-use zone mentioned in QUESTION 3.2.2 (a).

It is on the outskirts due to bad odours. (2)
Land is cheaper. (2)
Huge space is available for extending the sewage works. (2)
[Any ONE] (1 x 2) (2)

3.3 Refer to both the topographical map and the orthophoto map.

3.3.1 The orthophotomap is an example of gathering data through remote sensing.

(a) Define the concept *remote sensing*.

Refers to getting (gathering) information about the earth's surface from a (vertical) distance e.g. satellite images (2)
[CONCEPT] (1 x 2) (2)

(b) How did remote sensing assist developers in determining the site of Saldanha Bay as an IDZ?

By using satellite images they got a broader perspective of the relief of the area. (2)
They were able to determine the availability of land for expansion.(2)
[Any ONE] (1 x 2) (2)

3.3.2 Refer to the Saldanha Bay IDZ on the topographic map.

(a) State the data layer that creates better access for imports and exports and give an example of the data layer from the topographic map.

Data layer: Transport (infrastructure)(1)
Example: Harbour (1) Roads (1) Railway (1) (2 x 1) (2)

(b) Explain how this data layer mentioned in QUESTION 3.3.2 (a), improved exports and imports to the Saldanha Bay IDZ.

The availability of the harbour for (cheaper) export and import products (2)
Better accessibility to the harbour through roads and railway lines (2) (1 x 2) (2)

TOTAL SECTION B: 30

TOTAL: 150