KWAZULU-NATAL PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

GEOGRAPHY P2

PREPARATORY EXAMINATION

SEPTEMBER 2021

MARKS: 150

TIME: 3 hours

This question paper consists of 11 pages.

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INSTRUCTIONS AND INFORMATION

1. This question paper consists of THREE questions:

   SECTION A

   QUESTION : 1 RURAL AND URBAN SETTLEMENTS (60 MARKS)

   QUESTION : 2 ECONOMIC GEOGRAPHY OF SOUTH AFRICA (60 MARKS)

   SECTION B

   QUESTION : 3 MAP SKILLS AND CALCULATIONS (30 MARKS)

2. Answer ALL THREE questions in the answer book provided.
3. ALL diagrams are included in the ANNEXURE.
4. Leave a line open between subsections of questions answered.
5. Start EACH question at the top of a NEW page.
6. Number your answers correctly according to the numbering system used in this question paper.
7. Do NOT write in the margins of your ANSWER BOOK.
8. Where possible, illustrate your answers with labelled diagrams.
9. Write clearly and legibly.
10. You may use a magnifying glass.
11. The unit of measurement must be given in the final answer, where applicable, e.g. 10km, 4°C, east.

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SECTION B

QUESTION : 3 MAP SKILLS AND CALCULATIONS (30 MARKS)

INSTRUCTIONS AND INFORMATION

1. You are provided with a 1:50 000 topographical map (2527 CA RUSTENBURG (WEST) and an orthophoto map (2527 CA 15 TLHABANE) of a part of the mapped area.

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

3. Show ALL calculations and formulae, where applicable. Marks will be allocated for these.

4. Indicate the unit of measurement in the final answer of calculations.

5. You may use a non-programmable calculator.

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

ENGLISH	AFRIKAANS
Aerodome	Vliegveld
Caravan Park	Karavaanpark
Diggings	Uitgrawings
Golf Course	Gholfbaan
Gap	Poort
Holiday Resort	Vakansieoord
Island	Eiland
Purification Plant	Watersuiweringsaanleg
River	Rivier
Sewage Works	Rioolwerke

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SECTION A:

QUESTION 1: RURAL AND URBAN SETTLEMENTS

1.1 Refer to settlements **A - G** in FIGURE 1.1 found in the southern hemisphere. Indicate the settlement to which each of the following descriptions refer. Write only the letter (**A – G**) next to the question number (1.1.1 – 1.1.7) in the ANSWER BOOK. Example, 1.1.8. **H**. You may use a letter **ONCE ONLY.**

1.1.1 The smallest type of rural settlement.

1.1.2 Settlement that can be classified as a dry point settlement.

1.1.3 This settlement takes a linear shape.

1.1.4 Has functions such as school, shops, place of worship.

1.1.5 Settlement that can be classified as a wet point settlement.

1.1.6 The main function of this settlement is to attract holiday makers.

1.1.7 This settlement that is found on a slope receiving direct sunlight.

(7 x 1)(7)

1.2 Choose the correct word(s) from those given in brackets. Write only the correct word(s) next to the question number (1.2.1 – 1.2.8) in the ANSWER BOOK. Example 1.2.9 urban blight

1.2.1 A mixture of functions such as factories, shops, places of entertainment is found in the (transition/industrial) zone.

1.2.2 (Urban growth/Urbanisation) refers to the increase in the percentage of people living in urban areas.

1.2.3 The largest urban settlement in South Africa is a (megalopolis/ conurbation).

1.2.4 A metropolitan area will have a (higher/lower) sphere of influence than a town.

1.2.5 Goods bought frequently are classified as (high/low) order goods.

1.2.6 Poor service delivery is an example of (economic/social) injustice.

1.2.7 (Urban morphology/Urban decay) refers to the form and shape of a city.

1.2.8 The grid iron street pattern is (easier/more difficult) to navigate than the unplanned irregular street pattern.

(8 x 1)(8)

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1.3 Refer to FIGURE 1.3 a case study on rural urban migration.

1.3.1 Refer to the graph showing the percentage of people below the poverty lines.

(a) Approximately how many percent of migrants were uplifted out of poverty. (1 x 1) (1)

(b) Explain how migration has uplifted migrants out of poverty. (1 x 2) (2)

1.3.2 Explain social challenges that people migrating to the urban areas may experience. (2 x 2) (4)

1.3.3 In a paragraph of approximately EIGHT lines, explain how speeding up the process of land reform could reduce rural depopulation. (4 x 2) (8)

1.4 Study FIGURE 1.4 showing urban land use.

1.4.1 Give ONE visible characteristic of the CBD. (1 x 1) (1)

1.4.2 Describe the difference in land values between the CBD and the rural-urban fringe. (1 x 2) (2)

1.4.3 Explain TWO factors that could have influenced the location of the regional shopping centre. (2 x 2) (4)

1.4.4 Assess the negative impact that the cement factory would have on the environment. (2 x 2) (4)

1.4.5 Discuss the role of the Green Belt in a sustainable development of the city. (2 x 2) (4)

1.5 Study the photo in FIGURE **1.5 A** showing traffic congestion and a graph showing peak hour traffic in FIGURE **1.5 B**

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

1.5.2 Refer to the graph in FIGURE **1.5 B**

(a) State the time in the afternoon when the traffic is at its peak. (1 x 1)(1)

(b) Explain possible reasons for congestion at this time. (2 x 2) (4)

1.5.3 Discuss the impact that traffic congestion would have on drivers. (2 x 2) (4)

1.5.4 Recommend possible strategies that can be put in place to reduce the number of vehicles entering the city. (2 x 2) (4)

[60]

QUESTION 2: ECONOMIC GEOGRAPHY OF SOUTH AFRICA

2.1 Choose a term from COLUMN B that matches the description in COLUMN A. Write only the letter (A–I) next to the question number (2.1.1–2.1.8) in the ANSWER BOOK, for example 2.1.9 J.

COLUMN A		COLUMN B	
2.1.1	Type of economic activity where a service is rendered	A	gross national product
		B	trade
2.1.2	Total value of goods and services produced in a country, by citizens and non-citizens over a period of a year	C	tertiary activities
		D	local trade
2.1.3	Trade is equal and in good faith between consumers and economically disadvantaged producers	E	quaternary economic activities
		F	fair trade
2.1.4	Import and export relations between two countries	G	gross domestic product
2.1.5	The total value of goods and services produced in a country by the permanent inhabitants in one year	H	international trade
		I	secondary economic activities
2.1.6	Trade conducted inside of a country's borders		
2.1.7	Economic activities that are concerned with scientific research and the collecting and processing of information		
2.1.8	Exchange of goods and services among countries across national borders		

(8 x 1) (8)

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2.2 Give ONE word/term for each of the following descriptions by choosing a word/ term from the list below. Write only the word/term next to the question number (2.2.1–2.2.7) in the ANSWER BOOK, for example 2.2.8 Ubiquitous industries

Industrial decentralization, Market orientated industries, Bridge industries, Industrial centralization, Spatial Development Initiative, Footloose industries, Border industries Raw material orientated industries

2.2.1 Industries using heavy, bulky or perishable raw materials are situated closest to the source of supply.

2.2.2 The located of Industries in the periphery or rural areas away from core areas.

2.2.3 Industries that need to be closer to the customers.

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

2.2.5 Movement of industries to core areas.

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

2.2.7 Strategy aimed at developing and improving existing transport infrastructure. (7 x 1) (7)

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

2.3.1 Give ONE environmental factor, from the article, that is responsible for the high food prices in South Africa. (1 x 1) (1)

2.3.2 State how this environmental factor, mentioned in QUESTION 2.3.1, impacted on food prices. (1 x 1) (1)

2.3.3 Give the percentage of the South African population that is food insecure. (1 x 1) (1)

2.3.4 Discuss any TWO factors that negatively impact food secutiry in South Africa. (2 x 2) (4)

2.3.5 Write a paragraph of approximately EIGHT lines in which you propose sustainable measures that can be put in place to improve food security in South Africa. (4 x 2) (8)

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2.4 Refer to the photo in FIGURE 2.4 showing an informal sector activity.

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

2.4.2 State the percentage by which the informal sector is growing in South Africa. (1 x 1) (1)

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

2.4.4 Discuss TWO challenges facing South Africa's informal sector. (2 x 2) (4)

2.4.5 Suggest TWO reasons why the City Council finds it is necessary for informal traders to have trading licenses. (2 x 2) (4)

2.5 Refer to the map and extract on the Saldanha Bay IDZ.

2.5.1 In which province is the Saldanha Bay IDZ situated? (1 x 1) (1)

2.5.2 Name ONE project each from the extract that will be centred in a secondary and tertiary economic activity. (2 x 1) (2)

2.5.3 Explain how new-build port infrastructure facilities will increase investment in the Saldanha Bay region. (2 x 2) (4)

2.5.4 Explain how the new investments in the Saldanha Bay will benefit the local people. (2 x 2) (4)

2.5.5 Evaluate the negative impact that this zinc smelter project mentioned in the extract may have on the environment around Saldanha Bay. (2 x 2) (4)
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SECTION B: MAP SKILLS AND CALCULATIONS

QUESTION 3

The questions below are based on the GENERAL INFORMATION OF RUSTENBURG (FUGURE 3), 1:50 000 topographic map (2527CA RUSTENBURG WEST) as well as the orthophoto map (2527 CA 15 TLHABANE) as part of the mapped area.

3.1 MAPWORK TECHNIQUES AND CALCULATIONS

3.1.1 (a) Various options are provided as possible answers to the following question. Choose the answer and write only the letter (A–D)

The length of the area demarcated in red on the topographic map is … km.

A 4.65
B 3.95
C 9.3
D 7.9 (1 x 1) (1)

(b) With the aid of your answer to QUESTION 3.1.1 (a), calculate the area of the orthophoto map, in km, as demarcated in red on the topographic map.

Formula: Area = Length (L) x Breadth (B) (3 x 1) (3)

(c) By how many times is the scale of the orthophoto map larger than the topographic map? (1 x 1) (1)

3.1.2 Refer to the spot height 1216 in block **I3** and trigonometrical station 257 in block **I5** on the topographic map.

(a) The difference in height (vertical interval) between spot height 1216 and trigonometrical station 257 is … metres.

A 959
B 423
C 423,9
D 1473 (1 x 1) (1)

(b) With the aid of your answer to QUESTION 3.1.2 (a) Calculate the average gradient between spot height 1216 and trigonometrical station 257.

Formula : $\dfrac{\textbf{Vertical Interval}}{\textbf{Horizontal Equivalent}}$ (4 x 1) (4)

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3.2 APPLICATION AND INTERPRETATION

3.2.1 Refer to the settlement at point **V** in block **J**1.

(a) The settlement pattern found at point **V** is (nucleated/ dispersed). (1 x 1) (1)

(b) Explain ONE disadvantage for a farm worker living in the settlement identified in QUESTION 3.2.1(a). (1 x 2) (2)

3.2.2 Refer to blocks **D8** to **D10** and **E8** to **E10** on the topographical map.

(a) State TWO physical factors that favour farming in this area. (2 x 1) (2)

(b) Explain how infrastructure promotes farming in this area. (1 x 2) (2)

3.2.3 The residential area Rustenburg North on the orthophoto is a high income residential area. Give ONE piece of evidence from the orthophoto map to support this statement. (1 x 1) (1)

3.2.4 Refer to land-use zone **1** on the orthophoto map.

(a) Various options are provided as possible answers to the following question. Choose the answer and write only the letter (A–D)

The land-use zone **1** is a/an ... zone.

A residential
B commercial
C transitional
D industrial (1 x 1) (1)

(b) State ONE factor that has influenced the location of this land-use zone. (1 x 1) (1)

(c) Suggest ONE problem that the residents of the settlement next to land-use zone **1** are likely to experience. (1 x 2) (2)

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3.3 GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

3.3.1 Data manipulation refers to data that has been processed and converted into useful information. A primary source data is manipulated to create a secondary source data.

(a) Is the orthophoto map an example of a primary or secondary source? (1 x 1)(1)

(b) Give a reason for your answer to QUESTION 3.3.1 (a). (1 x 2)(2)

3.3.2 Define the concept *data layering*. (1 x 2) (2)

3.3.3 Give an example of a land use in block **A5.** (1 x 1)(1)

3.3.4 Discuss the importance of data layering in a GIS. (1 x 2)(2)

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TOTAL FOR SECTION B: [30]
TOTAL MARKS: 150

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