

# NATIONAL SENIOR CERTIFICATE

**GRADE 11** 

### **NOVEMBER 2020**

## GEOGRAPHY P2 EXEMPLAR

**MARKS: 150** 

TIME: 2 hours

This question paper consists of 10 pages.

### INSTRUCTIONS AND INFORMATION

- 1. This question paper consists of THREE questions.
- 2. All diagrams are included in the ANNEXURE.
- 3. Where possible, illustrate your answers with labelled diagrams.
- 4. Leave a line between subsections of questions answered.
- 5. Start EACH question at the top of a NEW page.
- 6. Number the questions correctly according to the numbering system used in this question paper.
- 7. Do NOT write in the margins of the ANSWER BOOK.
- 8. In SECTION B you are provided with a 1:50 000 topographical map (2527BD HARTBEESPOORT DAM) and an orthophoto map of a part of the mapped area.
- 9. Show ALL calculations and formulae, where applicable. Marks will be allocated for these.
- 10. Indicate the unit of measurement in the final answer of calculations, e.g. 10 km; 2,1 cm.
- 11. You may use a non-programmable calculator and a magnifying glass.
- 12. The area demarcated in RED and BLACK on the topographical map represents the area covered by the orthophoto map.
- 13. Write neatly and legibly.

# SECTION A: DEVELOPMENT GEOGRAPHY, RESOURCES AND SUSTAINABILITY

### **QUESTION 1**

- 1.1 Choose the correct word(s) from those given in brackets which will make each statement geographically CORRECT. Write only the word(s) next to the question numbers (1.1.1–1.1.8).
  - 1.1.1 According to the Brandt report, 80% of the world's income is earned in the (north/south).
  - 1.1.2 (MEDCs/LEDCs) export mainly raw materials.
  - 1.1.3 A limitation of (Rostow's/Friedman's) model is that it does not take population growth rate into consideration.
  - 1.1.4 Finding a vaccine for the coronavirus (COVID-19) is an example of development from a (regional/global) context.
  - 1.1.5 (Top down/Bottom up) approach is often a more successful approach in community-based development.
  - 1.1.6 The sustainability model involves the (core and periphery/economy and environment).
  - 1.1.7 Development in (MEDC/LEDC) countries is achieved by a market economy. (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 (1.2.1–1.2.8) in the ANSWER BOOK, for example 1.2.9 A.
  - 1.2.1 ... is the world's most traded commodity.
    - A Cotton
    - B Wheat
    - C Oil
    - D Gold
  - 1.2.2 Aid from donor countries that includes masks and ventilators in times of a medical crisis, is an example of ... aid.
    - A technical
    - B conditional
    - C export
    - D humanitarian
  - 1.2.3 ... forms the basis of an export-led approach to development.
    - A Technology
    - **B** Manufacturing
    - C Mining
    - D Construction

1.2.4		s/are an example of a trading relationship that protect ducts from foreign competition.	s local	
	A B C D	Trade barriers Free trade Fair trade Unfair trade		
1.2.5	1.2.5 A Gender Inequality Index (GII) of indicates more equality an males and females.			
	A B C D	0,83 0,48 0,21 0,64		
1.2.6	Trac	de blocs encourage		
	A B C D	fair trade unfair trade. free trade. trade barriers.		
1.2.7	describes the relationship between the value of a country's exports and imports.			
	A B C D	Terms of trade Balance of trade Balance of payments Gross national product		
1.2.8	is	s the world's fastest developing economy.		
	A B C D	South Africa Japan China India	(8 x 1)	(8)

1.3	Refer develo	to the cartoon in FIGURE 1.3 showing an economic indicator of pment.			
	1.3.1	What is the <i>Gini coefficient</i> ? (1 x 1)	(1)		
	1.3.2	How does the cartoon portray the Gini coefficient? (1 x 1)	(1)		
	1.3.3	Would the Gini coefficient in this cartoon show a statistical score closer to zero (0) or one (1)? (1 x 1)	(1)		
	1.3.4	Discuss THREE ways in which a country can improve on sharing wealth in a country. (3 x 2)	(6)		
	1.3.5	Explain how THREE positive demographic indicators can show an improvement of the economic level of development in a country.(3 x 2)	(6)		
1.4	Read the article in FIGURE 1.4 referring to globalisation.				
	1.4.1	According to the article, how did globalisation aid in the spread of the COVID-19 pandemic? (1 x 1)	(1)		
	1.4.2	Quote ONE advantage of globalisation from the article. (1 x 1)	(1)		
	1.4.3	Name ONE example of a multinational corporation (MNC) in the article. (1 x 1)	(1)		
	1.4.4	Discuss how the COVID-19 pandemic would be a disadvantage to multinational corporations (MNCs). (2 x 2)	(4)		
	1.4.5	Write a paragraph of approximately EIGHT lines explaining why globalisation is still viewed as the main stimulus of economic growth in the world. (4 x 2)	(8)		
1.5		he case study in FIGURE 1.5 on community development in Zambia and r the questions that follow.			
	1.5.1	State whether the case study refers to rural or urban community development. (1 x 1)	(1)		
	1.5.2	Describe TWO examples to prove that Veronica's quality of life has improved. (2 x 2)	(4)		
	1.5.3	The improved quality of life for these individuals will probably have positive ripple effects in their community. Suggest TWO positive ripple effect for Veronica's community. (2 x 2)	(4)		
	1.5.4	Describe THREE advantages of using this type of technology referred to in the case study. (3 x 2)	(6) <b>[60]</b>		

### **QUESTION 2**

- 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 (2.1.1–2.1.7) in the ANSWER BOOK, for example 2.1.8 A.
  - 2.1.1 ... is the only commercial nuclear power station in South Africa.
    - A Kusile
    - B Arnot
    - C Koeberg
    - D Lethabo
  - 2.1.2 Green energy is ...
    - A produced from fossil fuels.
    - B renewable.
    - C non-renewable.
    - D a product from greenhouse gases.
  - 2.1.3 ... is the power utility producing most of South Africa's electrical energy.
    - A Telkom
    - B Sasol
    - C Eskom
    - D Koeberg
  - 2.1.4 The amount of carbon dioxide emitted into the atmosphere by an individual is referred to as ...
    - A greenhouse footprint.
    - B green movement.
    - C carbon footprint.
    - D environmental footprint.
  - 2.1.5 The ... signed in 1997 requires countries to reduce the amount of their greenhouse gas emissions.
    - A Paris accord
    - B COP 17
    - C BRICS treaty
    - D Kyoto Protocol
  - 2.1.6 Energy gained from hot rocks below the earth's surface is called ... energy.
    - A biomass
    - B geothermal
    - C wind
    - D biofuel

	2.1.7 is the mineral needed for the generation of nuclear power.				
		A Coal B Gold C Uranium D Platinum	(7 x 1)	(7)	
2.2	2.2 Choose the correct word(s) from those given in brackets which will make each statement geographically CORRECT. Write only the word(s) next to the question numbers (2.2.1–2.2.8).				
	2.2.1	The (D/R) horizon is the deepest soil horizon in the soil profile.			
	2.2.2	A (steep/gentle) topography results in well-drained and steeper	soils.		
	2.2.3	Deforestation is a (human/physical) agent of erosion.			
	2.2.4	Soil colour is influenced by (time/parent material).			
	2.2.5	Humus content is mostly found in the (top soil/sub soil).			
	2.2.6	The main agent of soil erosion is (water/drought).			
	2.2.7	(Renewable/Non-renewable) resources are produced by nature constantly.	<b>;</b>		
	2.2.8	Partially weathered rock material is found in the (regolith/subso	il). (8 x 1)	(8)	
2.3		to the cartoon in FIGURE 2.3 showing the relationship b	etween		
	2.3.1	Name the natural resource being depleted in the cartoon.	(1 x 1)	(1)	
	2.3.2	According to the cartoon, why is this natural resource being dep		(2)	
	2.3.3	How does the depletion of this natural resource affect the environ	nment? (2 x 1)	(2)	
	2.3.4	Discuss the positive economic impact that the depletion of this r has for development in a country.	resource (2 x 2)		
	2.3.5	Explain how countries could implement more sustainable strate protect their natural resources.	egies to (3 x 2)	(6)	

2.4	Refer to FIGURE 2.4 showing South Africa's energy plan.				
	2.4.1	What percentage of South Africa's energy plan would coal main 2030?	ake up (1 x 1)	(1)	
	2.4.2	Name any TWO other conventional sources of energy that we part of South Africa's energy plan in 2030.	ill be a (2 x 1)	(2)	
	2.4.3	Why would South Africa still be so reliant on coal in 2030?	(2 x 1)	(2)	
	2.4.4	Discuss the impact that South Africa's reliance on coal would on the environment.	have (2 x 2)	(4)	
	2.4.5	Explain why nuclear energy would not play a major role in Africa's energy plan in 2030.	South (3 x 2)	(6)	
2.5	Refer to FIGURE 2.5 which illustrates non-conventional sources of energy.				
	2.5.1	Why are solar and wind energy examples of non-conv sources of energy?	entional (1 x 1)	(1)	
	2.5.2	Give TWO pieces of evidence from the sketch to support the statement that the source of non-conventional energy is relat cheap.		(2)	
	2.5 3	How can solar energy be advantageous to South Africa's energy sources?	current (2 x 1)	(2)	
	2.5.4	Describe the negative impact that wind turbines, used to gen wind energy, have on the environment.	erate (1 x 2)	(2)	
	2.5.5	In a paragraph of approximately EIGHT lines, explain the important the non-conventional sources of energy, depicted in the sket the economy of South Africa.		(8) <b>[60]</b>	

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### SECTION B: GEOGRAPHICAL SKILLS AND TECHNIQUES

The questions below are based on the 1:50 000 topographical map 2527 DB HARTBEESPOORT DAM, as well as the orthophoto map of a part of the mapped area.

- 3.1 3.1.1 The scale of the topographic map is 1 : 50 000. Write down the scale as a word scale. (1 x 1) (1)
  - 3.1.2 What is the straight-line distance from trigonometrical station 104 in block **C2** to spot height 1521 in block **B3**? Give your answer in metres. (2 x 1) (2)
- 3.2 3.2.1 Calculate the magnetic declination of Hartbeespoort Dam for 2020. Show ALL calculations. Marks will be awarded for calculations.

 $(5 \times 1) (5)$ 

- 3.2.2 Compare the magnetic declination for 2020 to the magnetic declination for 2012 and indicate which one is bigger. (1 x 1) (1)
- 3.2.3 Motivate your answer to QUESTION 3.2.2. (1 x 1) (1)
- 3.3 3.3.1 The feature at **5** on the orthophoto map is/are a/an ...
  - A rugby fields.
  - B tennis courts.
  - C open-parking area.
  - D purification plant.
  - 3.3.2 The primary economic activity at **P** in block **A1** is a/an ...
    - A sports fields.
    - B excavations.
    - C cultivation.
    - D non-perennial river.
  - 3.3.3 Identify the environmental factor affecting the area in block **C5**:
    - A River
    - B Dam
    - C Sewage works
    - D Road (3 x 1) (3)

3.4 Refer to the FACT FILE (FIGURE 3.4) on the Hartbeespoort Dam and the topographical map:

The Schoemansville town council has decided to try and improve the level of development of this area through tourism. Discuss how the council would promote this area using evidence from blocks **B2** and **B3**. (2 x 2)

3.5 Refer to block **E1** on the topographical map.

3.5.1 Identify the environmental problem found in the area.  $(1 \times 1)$  (1)

3.5.2 What TWO sustainable strategies can be implemented to prevent and control the impact identified in QUESTION 3.5.1? (2 x 2) (4)

### **GEOGRAPHICAL INFORMATION SYSTEMS (GIS)**

3.6 Refer to FIGURE 3.6 taken of the Hartbeespoort Dam found in block **B2** on the topographical map, and answer the following questions.

3.6.1 Is the photograph a raster or a vector image? (1 x 1) (1)

3.6.2 Give a reason for your answer to QUESTION 3.6.1. (1 x 2) (2)

3.6.3 What type of spatial object is the dam wall in block **B2** on the topographical map? (1 x 1) (1)

3.7 Refer to the orthophoto map.

3.7.1 Does the orthophoto map have a *low* or *high* resolution?

Give a reason for your answer. (1 + 1 x 2) (3)

3.7.2 Name ONE factor in the remote sensing process that will affect the resolution of the orthophoto map. (1 x 1) (1) [30]

**GRAND TOTAL: 150** 

(4)