

basic education

Department: Basic Education **REPUBLIC OF SOUTH AFRICA**

NATIONAL SENIOR CERTIFICATE

GRADE 12

GEOGRAPHY P2

FEBRUARY/MARCH 2012

........

MARKS: 100

1

11

TIME: 1¹/₂ hour

EXAMINATION NUMBER							
CENTRE NUMBER							

MARK SCORED	Q1	Q2	Q3	Q4	TOTAL
MARKER					
SENIOR MARKER					
CHIEF MARKER					
MODERATOR					
TOTAL	20	20	40	20	100

This question paper consists of 11 pages and 1 page for rough work.

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Please turn over

RESOURCE MATERIAL

- 1. An extract from topographical map 3318DB PAARL.
- 2. Orthophoto map 3318DB 25 PAARL.
- 3. NOTE: The resource material must be collected by the schools for their own use.

INSTRUCTIONS AND INFORMATION

- 1. Write your EXAMINATION NUMBER and your CENTRE NUMBER in the spaces provided on the cover page.
- 2. Answer ALL the questions in the spaces provided in this question paper.
- 3. You are supplied with a 1 : 50 000 topographical map 3318DB PAARL and an orthophoto map of a part of the mapped area.
- 4. You must hand the topographical map and the orthophoto map to the invigilator at the end of this examination session.
- 5. You may use the blank page at the back of this question paper for all rough work and calculations. Do NOT detach this page from the question paper.
- 6. Show ALL calculations. Marks will be allocated for calculations and formulae.
- 7. You may use a non-programmable calculator.

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POSITION OF PAARL WITHIN SOUTH AFRICA

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

ENGLISH

Dipping tanks Firebreaks Landing strip Stadium Station Sports club Wild flower reserve Nature reserve

AFRIKAANS

Dipbakke Voorbrande Landingstrook Stadion Stasie Sportklub Veldblomreservaat Natuurreservaat

QUESTION 1: MULTIPLE-CHOICE QUESTIONS

The questions below are based on the 1:50 000 topographical map 3318DB PAARL, as well as the orthophoto map 3318DB 25 PAARL as part of the mapped area. Various options are provided as possible answers to the following questions. Choose the answer and write only the letter (A–D) in the block next to each question.

- 1.1 Worcester is approximately ... kilometres from Paarl.
 - А 4
 - 49 В
 - С 9
 - D 490
- 1.2 The street pattern around the church in block **G12** on the topographical map is ...
 - А radial.
 - В planned irregular.
 - С a gridiron.
 - unplanned irregular. D
- 1.3 The Berg River is flowing in a ... direction.
 - А northerly
 - В south-easterly
 - С southerly
 - D north-easterly
- 1.4 The length of the Nantes Dam wall in block **H10** is ... metres.
 - А 200
 - 0.20 В
 - С 20
 - D 2 0 0 0
- 1.5 An orthophoto map is a ... photograph with a map scale of 1 : 10 000.
 - vertical aerial А
 - В high oblique
 - С low oblique
 - D horizontal
- 1.6 The service that is provided at the number marked **5** on the orthophoto map is а...
 - А hotel.
 - school. В
 - С police station.
 - D hospital.

- 1.7 The R45 is a/an ...
 - A national freeway.
 - B arterial route.
 - C main road.
 - D secondary road.
- 1.8 The contour interval on the orthophoto map is ... metres.
 - A 20
 - B 10
 - C 50
 - D 5

1.9 The Berg River can be described as a/an ... river.

- A periodic
- B permanent
- C episodic
- D exotic
- 1.10 The feature marked **6** on the orthophoto map is a ...
 - A telephone line.
 - B railway line.
 - C power line.
 - D fence wall.

(10 x 2)

[20]

QUESTION 2: GEOGRAPHICAL TECHNIQUES AND CALCULATIONS

2.1 Calculate the gradient between Honey Dew, (marked **7**), and Groenleegte, (marked **8**) on the orthophoto map. Show ALL calculations. Marks will be allocated for calculations.

(6)

2.2		Refer to both the topographical map and the orthophoto map when answering the questions below.							
	2.2.1	Which one, the topographical map or the orthophoto map, has a larger scale?							
	2.2.2	Give ONE reason to support your answer to QUESTION 2.2.1.							
	2.2.3	By how much is the scale of the map that you have selected in QUESTION 2.2.1 larger?							
2.3	2.3.1	Give the true bearing of trigonometrical station 184 (block E6) from trigonometrical station 227 (block D5).							
	2.3.2	Calculate the magnetic bearing of trigonometrical station 184 (block E6) from trigonometrical station 227 (block D5).							
	2.3.3	Is there intervisibility between trigonometrical station 184 (block E6) and trigonometrical station 227 (block D5)?							
	2.3.4	Give a reason for your answer to QUESTION 2.3.3.							

2.4 Calculate the area covered by the orthophoto map in km². Use the demarcated area on the topographical map for all measurements. Show ALL calculations. Marks will be allocated for calculations.

(6) [20]

QUESTION 3: APPLICATION OF THEORY/MAP AND PHOTO INTERPRETATION

- 3.1 Refer to both the topographical map and the orthophoto map when answering the questions below.
 - 3.1.1 Name ONE primary activity practised in the mapped area.

(1 x 2) (2)

3.1.2 Give TWO reasons that favour the development of the activity mentioned in QUESTION 3.1.1.

(2 x 2) (4)

3.1.3 Name an industry that is likely to be found in Paarl considering the availability of local raw materials.

(1 x 2) (2)

	Paarl has a large industrial area (F12/13). Name TWO factors the favour the location of these industries.
	(2 x 2
Refer to t	he farm Caledonville in block D7 .
3.2.1	Is this farm practising commercial or subsistence farming?
	(1 x 2
3.2.2	Give TWO reasons to support your answer to QUESTION 3.2.1.
	(2 x 2
3.2.3	(2 x 2 Name TWO sources of water that are used on the farm.
3.2.3	
3.2.3	
Refer to	Name TWO sources of water that are used on the farm.
Refer to	Name TWO sources of water that are used on the farm. (2 x 2) the sewage works in block E12 . Give TWO pieces of evidence from

	(2 x 2)
There a serve?	are many small catchment dams on the map. What purpose do they
	(1 x 2)
Paarl is	a central place town.
3.6.1	As a central place town, what is the main function of Paarl?
	(1 x 2)
3.6.2	Name TWO services that the town offers.

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QUESTION 4: GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

4.1 Study the images below showing a variation in resolution. State whether image **A** or **B** has a better resolution, giving a reason for your answer.

Α

В



Reason: _____

- (2 x 2) (4)
- 4.2 Grade 10 learners from a school in Paarl have to do research on the Paarlberg landform as a volcanic feature. They are required to use both primary and secondary sources of information.
 - 4.2.1 Suggest a method that they can use to gather primary information.

(1 x 2) (2)

4.2.2 Discuss TWO disadvantages of using secondary sources of data.

(2 x 2) (4)

4.3 Give an example of a point, line and polygon features respectively, evident in block **H10**.

Point:		
Line:		
Polygon:		
,,,	(3 x 2)	(6)

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- 4.4 During major natural disasters, accessibility to the Paarl Valley is limited in order to determine the extent of the damage.
 - 4.4.1 Give an example of a remote sensing device that can be used to capture the extent of the damage.
 - (1 x 2) (2)

4.4.2 State ONE advantage of remote sensing.



ROUGH WORK AND CALCULATIONS