

GEOGRAPHY PAPER 2 MAPWORK

NOVEMBER 2019

MARKS: 75

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NAME AND SURNAME: \_\_\_\_\_

INSTRUCTIONS AND INFORMATION

1. Write your name in the space provided above.
2. A non-programmable calculator may be used.
3. Answer all questions in the spaces provided on the question paper.
4. The Topographical map and Orthophoto must be handed in – please erase pencil working after you have finished writing.
5. A glossary of Afrikaans names and English meanings is provided below.
6. Show all your working for calculations and write neatly.
7. The following English terms and their Afrikaans translations are shown on the Topographical map:

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

1.2 The topographical map index south-east of Parys is ...

A 2727AB.

B 2727AD.

C 2627DC.

D 2727BA.

\_\_\_\_\_

1.3 The topographical map scale is 1:50 000 means that one centimeter on the map represents..... kilometres on the ground.

A 0.01

B 0.1

C 0.5

C 0.05

\_\_\_\_\_

1.4 The height of the index contour line in block D5 is ... metres.

A 1 500

B 1 400

C 1 600

D 1 530

\_\_\_\_\_

1.5 A human factor limiting further expansion of Parys in a north-westerly direction is the ...

A permanent river.

B international boundary.

C provincial boundary.

D steep gradient.

\_\_\_\_\_

1.6 The general direction in which the non-perennial stream flows in block J8 is ...

A south.

B east.

C north.

D west.

\_\_\_\_\_

1.13 The man-made feature at 10 on the **orthophoto map** is a/an ...

A mine dump.

B excavation.

C dam.

D quarry.

\_\_\_\_\_

1.14 The main reason for the linear-shaped settlement at S in block I5 is the ...

A road.

B fence.

C boundary.

D river.

\_\_\_\_\_

1.15 The natural water purification feature in blocks J2 and J3 is a ...

A windpump.

B cultivated land.

C marsh and vlei.

D excavation.

\_\_\_\_\_

(15 x 1)

[15]

## QUESTION 2: MAP CALCULATIONS AND TECHNIQUES

2.1 Calculate the **distance in metres** along the railway line from Parys station to bridge in grid H10.

\_\_\_\_\_  
\_\_\_\_\_ 2

2.2 Calculate the **difference in height** between the top of Ouwerfskop in G10 and the row of trees in F10. 2

\_\_\_\_\_  
\_\_\_\_\_

2.5. Complete the cross-section between 6 and 7 above in the space provided. Fill in the missing heights in the blocks. (4)

2.6 Calculate the true bearing of the windpump in block F4 from spot height 1474 in block E6.

3

2.7 Refer to the information about the magnetic declination of Parys found on the topographical map.

2.7.1 Calculate the magnetic declination of Parys for 2019. Show ALL calculations. Marks will be awarded for calculations.

Difference in years:

\_\_\_\_\_

Mean annual change \_\_\_\_\_

Total change:

\_\_\_\_\_

Magnetic declination for 2018: \_\_\_\_\_

(5)

### QUESTION 3: APPLICATION AND INTERPRETATION

3.1 The area around Parys can be described as having one of the following Functions (economic activities):

A) Industrial      B) Agricultural      C) Tourism      D) Transportation

Choose **one** of the above options and **describe two reasons** from the map to support your answer.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5

**QUESTION 4: GEOGRAPHICAL INFORMATION SYSTEMS (GIS)**

4.1 Parys is located in the Vredefort Crater. Geologists are conducting research and collecting data on an on-going basis.

4.1.1 Is the data that is collected considered to be primary or secondary data?

\_\_\_\_\_ 1

4.1.2 Give a reason for your answer to QUESTION 4.1.1.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ 2

4.1.3 Explain how remote sensing can further assist the geologists with their research.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ 2

4.2 Name an example of:

A Line feature in block I6 \_\_\_\_\_

B Polygon feature in block F6 \_\_\_\_\_ 2

4.3 Attribute data provides useful information in a GIS.

4.3.1 Define the term attribute data.

\_\_\_\_\_  
\_\_\_\_\_ 2

4.4 Suggest two ways in which GIS could have assisted in the location of the hospital in block G9.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ 4