



SASTRI COLLEGE
DEPARTMENT OF SOCIAL SCIENCES
GEOGRAPHY GRADE 11 - 2020
TERM 1 - MARCH CONTROLLED TEST
PAPER 2 - MAPWORK

20

TIME : 30 MINUTES

EXAMINER : G.T. MOODLEY

TOTAL : 20 MARKS

MODERATOR : K. JAGGETH and K. SINGH

NAME OF LEARNER: _____
GRADE: _____

RESOURCE MATERIAL

1. An extract from topographic map 2930CB PIETERMARITZBURG
2. Orthophoto map 2930 CB 8 PIETERMARITZBURG
3. **NOTE: The resource material must be collected by schools for their own use.**

INSTRUCTIONS AND INFORMATION:

1. Write your EXAMINATION NUMBER and CENTRE NUMBER in the spaces on the cover page.
2. Answer ALL the questions in the spaces provided in this question paper.
3. You are provided with a 1 : 50 000 topographic map (2930CB PIETERMARITZBURG) and an orthophoto map (2930 CB 8 PIETERMARITZBURG) of a part of the mapped area.
4. You must hand the topographic map and the orthophoto map to the invigilator at the end of this examination session.
5. You may use the blank page at the end of this question paper for all rough work and calculations. Do NOT detach this page from the question paper.
6. Show ALL calculations and use the formulae provided, where applicable. Marks will be allocated for these.
7. Indicate the unit of measurement in the final answer of calculations, e.g. 10 km; 2,1 cm.
8. You may use a non-programmable calculator.
9. You may use a magnifying glass.
10. The area demarcated in RED on the topographic map represents the area covered by the orthophoto map.
11. The following English terms and their Afrikaans translations are shown on the topographic map:

ENGLISH

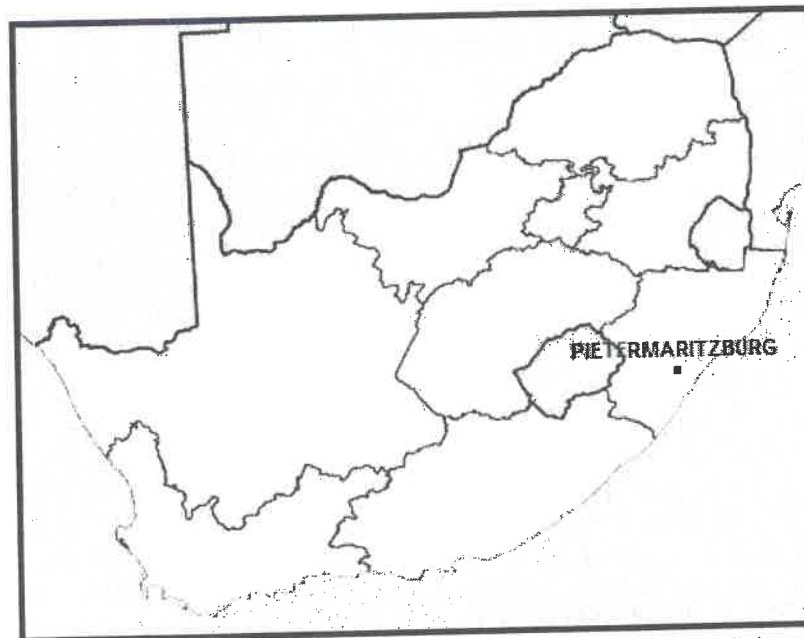
Aerodrome
Diggings
Canal
Firebreak
Golf Course
Hiking Trail
Hospital
River
Sewerage Works
Waterworks

AFRIKAANS

Vliegveld
Uitgrawings
Kanaal
Brandgordel
Golfbaan
Staproete
Hospitaal
Rivier
Rioolwerke
Waterwerke

GENERAL INFORMATION ON PIETERMARITZBURG

Pietermaritzburg (umGungundlovu) is the capital city of KwaZulu-Natal. This second-largest city in the province was founded in 1838. It is a regionally important industrial hub, well-known for processing aluminium, timber and dairy products. It has an estimated population of around 500 000 (including neighbouring townships). Pietermaritzburg is situated along the N3 national road, the main route between the Pretoria-Witwatersrand-Vereeniging conurbation and the harbour city of Durban, some 90 kilometres from Pietermaritzburg. The Oribi airport is situated just outside Pietermaritzburg and has a regular scheduled service to the OR Tambo International Airport in Johannesburg.



[Source: <http://en.wikipedia.org/wiki/pietermaritzburg>]

QUESTION ONE: MULTIPLE CHOICE QUESTIONS

1. The questions below are based on the 1:50 000 topographic map (2930CB Pietermaritzburg) as well as the orthophoto map. 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 Pietermaritzburg is the capital city of...

- A. Free State
- B. Eastern Cape
- C. Mpumalanga
- D. Kwa - Zulu Natal

1.2 The contour interval on the orthophoto map is metres:

- A. 5
- B. 10
- C. 15
- D. 20

1.3 If you travel along the N3 in a north-westerly direction you will reach the town/city of:

- A. New Hanover
- B. Donnybrook
- C. Merrivale
- D. Harrismith

1.4 The harbour closest to Pietermaritzburg is ...

- A. Cape Town
- B. Port Elizabeth
- C. Durban
- D. Richards Bay

1.5 The ... projection was used in the drawing of the orthophoto map of Pietermaritzburg:

- A. Azimuthal
- B. Lambert
- C. Mercator
- D. Gauss Conform

[5X1=5]

QUESTION TWO: MAPWORK TECHNIQUES AND CALCULATIONS

2.1 Calculate the straight line distance of line labelled **3** on the orthophoto map in kilometres. (3)

2.2. Calculate the area of the Demarcated Area in Red on the topographical map. (3)

2.3. Calculate the true bearing of point **7** from point **4** on the orthophoto map. (1)

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[7]

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QUESTION THREE: APPLICATION AND INTERPRETATION

3.1 The Sewerage Works in block I 6 has an ideal location. Give ONE reason to support this statement.

[1]

3.2. World's view in Pietermaritzburg (block F5) is a popular tourist attraction.

3.2.1 Give one reason as to why this attraction is popular.

[1]

3.2.2 Explain the positive impact of this attraction and many others in Pietermaritzburg on the local economy.

[1]

3.3 There are large areas of greenery within and surrounding the city of Pietermaritzburg. With reference to climate explain the importance of these green areas to the city.

[1]

[4]

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QUESTION 4: MAP PROJECTION AND GEOGRAPHICAL INFORMATION SYSTEMS

4.1 Refer to the orthophoto map.

4.1.1 Explain the term spatial resolution.

[1]

4.1.2 Why can one say that the orthophoto map has a high spatial resolution?

[1]

4.1.3 Is the orthophoto map an example of a raster or vector data? Give a reason for your answer.

Data:	[1]
Reason:	
	[1]

[4]

TOTAL : 20 MARKS

