

INSTRUCTIONS AND INFORMATION

1. Answer ALL the questions.
2. The questions in this paper are based on the 1:50 000 SA topographical map 3319CB Worcester and the 1:10 000 SA orthophoto map 3319CB15 which is a section of the mapped area.
3. Write your examination number as well as the centre number in the spaces provided on the FRONT page of this question paper.
4. Answer ALL questions ON this question paper.
5. Use the LAST page of this question paper for ALL rough work.
6. Some questions can only be answered if the topographical map and the orthophoto map are studied together.
7. On completion of this question paper, the question paper, as well as the topographical map and orthophoto map must be returned to the invigilator. The maps become the property of the school.
8. A glossary of some of the English and Afrikaans words and their translations appear on the next page.

GLOSSARY

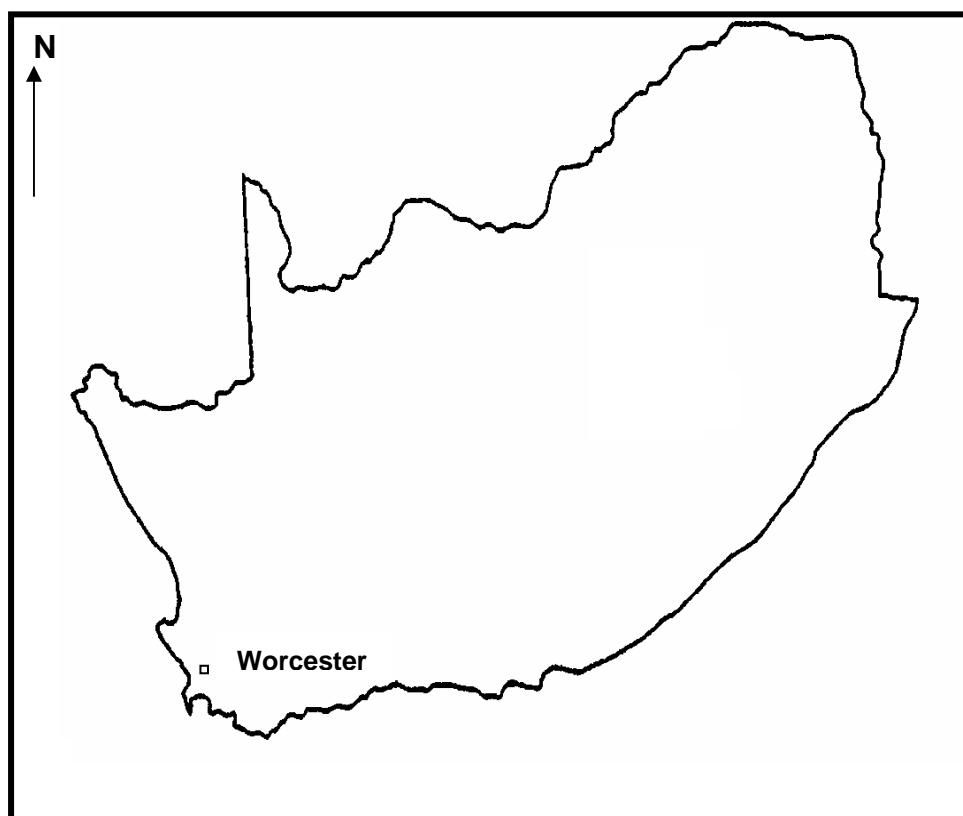
English

Cemetery
Diggings
Golf course
Hospital
Sewerage works
Show grounds
Rifle range

Afrikaans

Begraafplaas
Uitgrawings
Gholfbaan
Hospitaal
Rioolwerke
Skougronde
Skietbaan

POSITION OF WORCESTER WITHIN SOUTH AFRICA



SECTION A

QUESTION 1: MULTIPLE-CHOICE QUESTIONS

Refer to the 1:50 000 topographical map 3319CB and the 1:10 000 orthophoto 3319CB15 map of Worcester (attached) to answer the following questions.

Various possible options are provided as answers to the following questions/statements. Choose the answer and write only the letter (A – D) next to the question number (1.1 – 1.10) in the block provided on the right-hand side of the page.

1.1 The angle that is formed between true north and magnetic north is referred to as the ...

- A gradient.
- B magnetic declination.
- C vertical exaggeration.
- D geographic bearing.

1.2 The contour interval on the orthophoto map is ... metres.

- A 20
- B 5
- C 50
- D 60

1.3 The type of scale shown on the orthophoto map is a ... scale.

- A word
- B line
- C Richter
- D ratio

1.4 The feature found at J (block A6) on the topographical map is a ... feature.

- A cultural
- B physical
- C climatic
- D volcanic

1.5 The type of farming found at K on the orthophoto map is ... farming.

- A subsistence
- B nomadic
- C pastoral
- D commercial

- 1.6. The number 33 in the map reference number 3319CB Worcester refers to...
- A longitude.
 - B contour lines.
 - C latitude.
 - D isobars.
-
- 1.7 The recreational feature found at grid reference 33° 39 '20" S and 19° 27' 30" E is ...
- A a golf course.
 - B Florian Park.
 - C Esselen Park.
 - D Johnson Park.
-
- 1.8 The man-made feature found at block B/C9 on the topographical map is a ...
- A lake.
 - B dam.
 - C reservoir.
 - D sewerage disposal works.
-
- 1.9 What type of economic activity is found at M on the orthophoto map?
- A Primary
 - B Secondary
 - C Tertiary
 - D Quaternary
-
- 1.10 If one travels in a south-easterly direction on the road labelled N on the orthophoto map the next town will be ...
- A De Doorns.
 - B Worcester.
 - C Robertson.
 - D Caledon.
-

TOTAL SECTION A: (10 x 2) 20

SECTION B

QUESTION 2: MAPWORK TECHNIQUES AND CALCULATIONS

2.1 Calculate the average gradient from spot height • 212 (block E12) to trigonometrical station 207 (block C8). Show ALL the calculations. Use the formula:

$\frac{VI}{HE}$ OR $\frac{Rise}{Distance}$ OR $\frac{Height}{Distance}$

(5)

2.2 Calculate the magnetic declination for the year 2007. Show ALL the calculations.

Difference in years:

Mean annual change:

MD for 2007:

(5)

2.3 Calculate the area in square kilometres (km²) of block G8 on the topographical map. Use the formula:

Area = Length x Breadth (Length 3,7cm; Breadth 3 cm)

Length: _____

Breadth: _____

Area: _____

(5)

TOTAL SECTION B: 15

SECTION C

QUESTION 3: RELIEF AND DRAINAGE

3.1 Identify the following physical features on the topographical map:

P (block E7): _____

Q (block D5): _____

(2 x 2) (4)

3.2 Give TWO physical factors that favoured the location of the Brandvlei Dam.

(2 x 2) (4)

3.3 In which general direction is the Breë River flowing? Give ONE reason for your answer.

Answer: _____ (1 x 2) (2)

Reason: _____
_____ (1 x 2) (2)

3.4 Identify the drainage pattern found in block H7.

_____ (1 x 2) (2)

3.5 Suggest ONE physical factor hindering the northwards expansion of the town of Worcester.

_____ (1 x 1) (1)

TOTAL SECTION C: 15

SECTION D

QUESTION 4: SETTLEMENT AND ECONOMIC ACTIVITIES

4.1 The residential area of Van Riebeeckpark, S, on the orthophoto map, is a high-income residential area. Give TWO reasons in support of this statement.

_____ (2 x 2) (4)

- 4.2 4.2.1 Identify the urban functional zone, on the boundary of Worcester, where the sewage works (block D/E10) are situated.
- _____
- (1 x 2) (2)
- 4.2.2 Give ONE reason why they are located here.
- _____
- _____
- (1 x 2) (2)
- 4.3 Identify the land-use found at K and M on the orthophoto map. Choose your answers from the list below.
- cultivated land; orchards and vineyards; hospitals; schools
- K = _____
- (1 x 2) (2)
- M = _____
- (1 x 2) (2)
- 4.4 The industrial area of Worcester (block C10) has an ideal (very good) location. Give and explain TWO factors that influenced its location.
- _____
- _____
- _____
- _____
- (2 x 2) (4)
- 4.5 Identify the type of street pattern found in the CBD of Worcester.
- _____
- (1 x 1) (1)
- 4.6 Environmental damage has taken place at C12 on the topographical map. Name the type of primary activity that is responsible for this damage.
- _____
- (1 x 2) (2)

4.7 Fruit farming is an important economic activity in Worcester. List and explain any THREE factors that have favoured this type of activity in this area.

(3 x 2) (6)

TOTAL SECTION D: 25
GRAND TOTAL: 75