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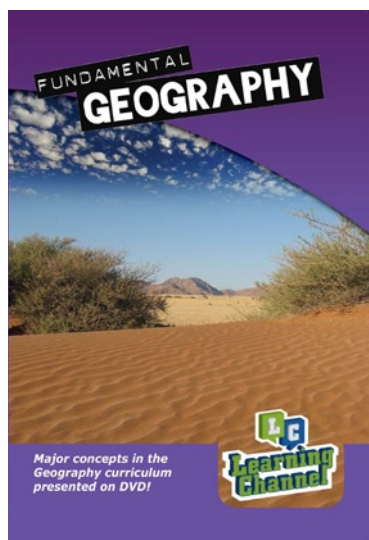
National Senior Certificate

Grade 12

Geography

Paper 2

Other products for Geography available from Learning Channel:



Marks: 100**Time: 1½ hours**

This question paper consists of 6 pages, a topographical map and an orthophoto map.

RESOURCES

1. An extract from the topographical map, 2930BA GREYTOWN and an extract from the orthophoto map, 2930BA 7 GREYTOWN.
2. A non-programmable calculator may be used.
3. Note: the resource material must be collected by the schools for their own use.

INSTRUCTIONS AND INFORMATION

1. Write your NAME and that of your SCHOOL in the spaces provided.
2. Answer ALL the questions in the spaces provided on this question paper.
3. You are supplied with an extract of the 1:50 000 topographical map, and an extract of the orthophoto map of the same area.
4. The topographical map and the orthophoto map must be handed over to the invigilator at the end of the examination session.
5. All Afrikaans terms that appear in the questions in this paper and their English translations are shown on the 1: 50 000 topographical map.

QUESTION 1

The following questions are based on the 1:50 000 topographical map, 2930BA GREYTOWN as well as the orthophoto map of the same area. Various possible options are provided as answers to the following questions. Choose an answer and write only the letter (A–D) in the block next to each question (1.1–1.10).

- 1.1 The number of the topographical map to the north of map 2930BA GREYTOWN is ...
- A. 2930BC
B. 2830DC
C. 2930AB
D. 2930BB
- 1.2 The exact location (co-ordinates) of the museum in block A6 is ...
- A. 30° 35' 12" S 29° 03' 26" E
B. 29° 03' 15" S 30° 35' 12" E
C. 29° 03' 55" S 30° 35' 06" E
D. 30° 35' 06" S 29° 03' 55" E
- 1.3 The direction of the Town Hall (block A6) from the museum (block A6) is ...
- A. north-east
B. south-south-west
C. north
D. south
-

- 1.4 The man-made feature labelled C on the topographical map in block A8 is a ... ☐
- A. Spot height
B. Other road
C. Trigonometrical beacon
D. Reservoir
- 1.5 The contour interval of the topographical map is ... ☐
- A. 5 m
B. 10 m
C. 20 m
D. 25 m
- 1.6 The natural feature marked A on the topographical map in block D3 is ... ☐
- A. A spur
B. A valley
C. A conical hill
D. A mesa
- 1.7 The map projection used on the orthophoto map is ... ☐
- A. Mercator
B. Lambert
C. Gauss Conform
D. Universal Transverse
- 1.8 The orthophoto map depicts blocks _____ on the topographical map. ☐
- A. A1; A2; A3; B1; B2; B3 and C1; C2; C3
B. A4; A5; A6; B4; B5; B6 and C4; C5; C6
C. B4; B5; B6; C4; C5; C6; and D4; D5; D6
D. A6; A7; A8; B6; B7; B8; and C6; C7; C8
- 1.9 The scale of the orthophoto map (1:10 000) is _____ than the 1:50 000 scale of the topographic map. ☐
- A. smaller
B. equivalent
C. disproportionate
D. larger
- 1.10 The feature marked 1 on the orthophoto map is ... ☐
- A. woodland
B. built-up area
C. cultivated land
D. recreational ground

10 × 2 [20]

QUESTION 2

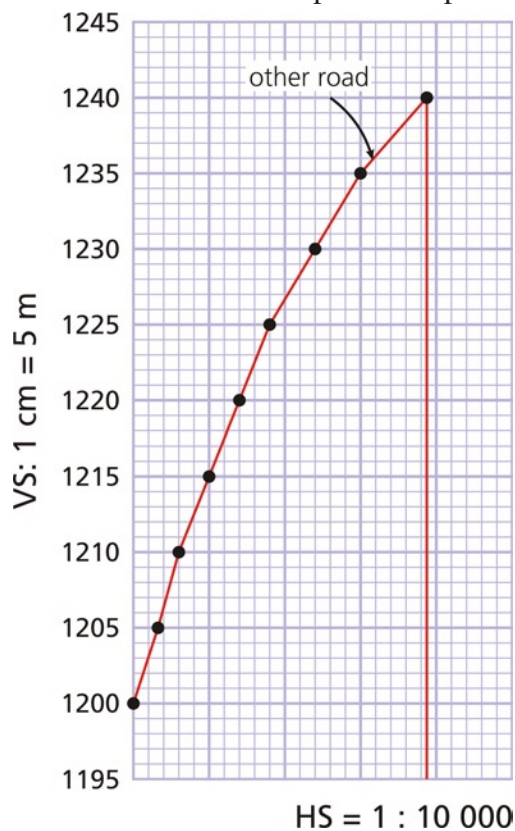
- 2.1 Calculate the real (actual) distance from point K along the other road (block B3) a car would travel to point H along the other road (block C2) in kilometres. Show all calculations.

(3)

- 2.2 How long would you take to travel from point K to point H if you travelled at 80 km/h? Show ALL calculations.

(2)

- 2.3 The following cross-section was drawn from point 3 to point 4 on the orthophoto map.



2.3.1 Use both the topographical map and the orthophoto map. Identify the contour value of both point 3 and point 4.

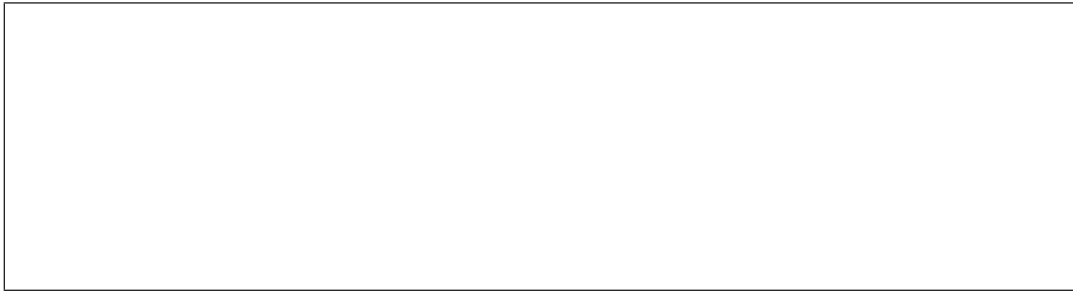
3: _____m

4: _____m

2.3.2 Identify the land use of the area marked 3 and 4. _____.

3 × 2 (6)

2.4 Calculate the vertical exaggeration of the cross-section. Show ALL calculations.



(3)

2.5.1 Calculate the average gradient from point 3 to point 4 on the orthophoto map. Show ALL the calculations.



(6)

2.5.2 Is the gradient that you calculated in 2.5.1 steep or gentle?

1 × 2 (2)

2.5.3 Explain your answer to 2.5.2.

1 × 2 (2)

[24]

QUESTION 3

3.1 The mapped area experiences seasonal rainfall. Support the statement with evidence from the map.

1 × 2 (2)

3.2 It is evident from the features depicted on the map that there is not always sufficient rain in the dry season, but other ways of storing water are used. Name one piece of evidence from the map that supports this observation.

1 × 2 (2)

3.3 Locate the golf course in block B6 on the topographical map.

3.3.1 Which physical factor played a role in selecting the site for this golf course?

1 × 2 (2)

3.3.2 Is the golf course centrally located? Motivate your answer with evidence from the map.

1 × 2 (2)

3.3.3 Why would the site selected for the golf course not be suitable for heavy industry?

1 × 2 (2)

3.4 Refer to both the orthophoto map and the topographical map and identify the features labelled B, D and J.

B: _____

D: _____

J: _____

3 × 2 (6)

3.5 Find the Town Hall in block A6.

3.5.1 In which urban land-use zone is the Town Hall located?

1 × 2 (2)

3.5.2 Why would one find the Town Hall in this land-use zone (as mentioned in 3.5.1)?

2 × 2 (4)

3.6 Greytown is a small town.

3.6.1 In which South African province is Greytown located?

_____.

1 × 2 (2)

3.6.2 Give TWO pieces of map evidence to substantiate your answer to 3.6.1.

2 × 2 (4)

3.6.3 What town is nearest to Greytown?

1 × 2 (2)

[30]

QUESTION 4

4.1 GIS can store, manage, analyse and display data. What does the acronym GIS stand for?

_____ (2)

4.2 To manage the data in GIS you must look at the different parts that make up the system. Name any TWO parts of GIS that make up the system.

_____ 2×2 (4)

4.3 There are two main types of data, namely spatial data and attribute data. Differentiate between *spatial data* and *attribute data*.

_____ 2×2 (4)

4.4 Explain what is meant by the terms vector, raster and image data.

4.4.1 Vector:

4.4.2 Raster:

4.4.3 Image:

_____ 3×2 (6)

4.5 Geographical information is obtained in a number of ways.

4.5.1 State any TWO ways in which geographical information can be obtained.

_____ 2×2 (4)

4.5.2 What is a geographical database?

_____ 1×2 (2)

4.5.3 Explain the difference between a geostationary and polar orbiting satellite.

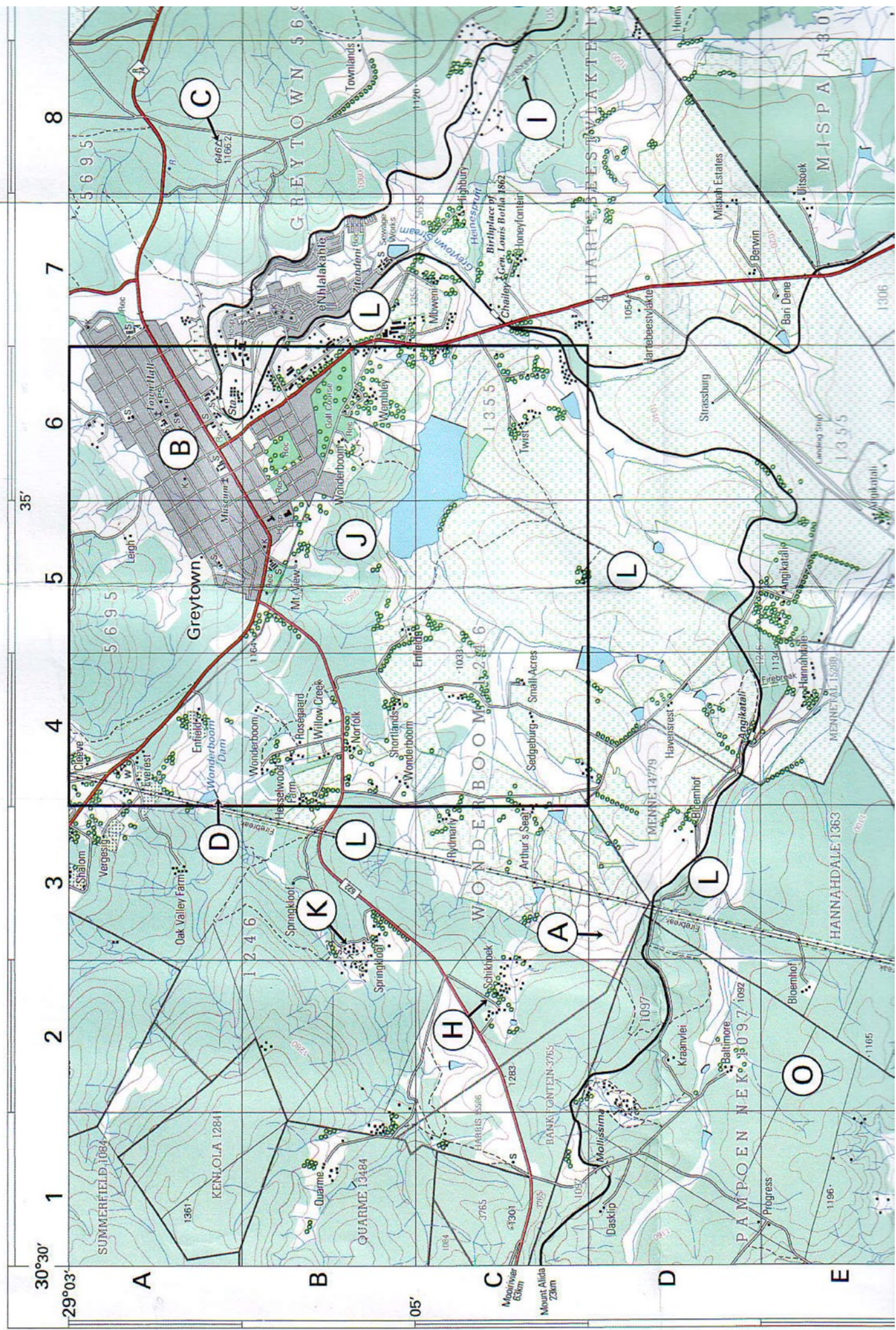
_____ (4)

[26]

100 marks

2930BA GREYTOWN

1:



2930 BA 7 GREYTOWN

30°33'
29°03'

+32°15X
Westerden

+32°16X

