

## GAUTENG DEPARTMENT OF EDUCATION

## SENIOR CERTIFICATE EXAMINATION

OCTOBER / NOVEMBER 2005  
OKTOBER / NOVEMBER 2005GEOGRAPHY HG  
(Second Paper: Map and Aerial  
Photograph Interpretation)

TIME: 1 ½ hours

MARKS: 80

---

---

**RESOURCE MATERIAL:**

- An extract from the topographical map of Estcourt.
- An extract from the orthophoto map of Estcourt.

**REQUIREMENTS:**

- Candidates must supply their own equipment and may make use of a calculator and a magnifying glass.

**INSTRUCTIONS:**

- Answer ALL the questions.
- In the case of calculations, **all steps** must be shown.
- The resource material (i.e. the topographical map and the orthophoto map) must be collected by the schools for their own further use.
- Candidates must draw on their knowledge of physical and human geography to answer the questions.
- The positions of features are indicated as follows:
  - Capital letters on the topographical map.
  - Numbers on the orthophoto map.

The following English terms with their Afrikaans equivalents appear on the topographical map:

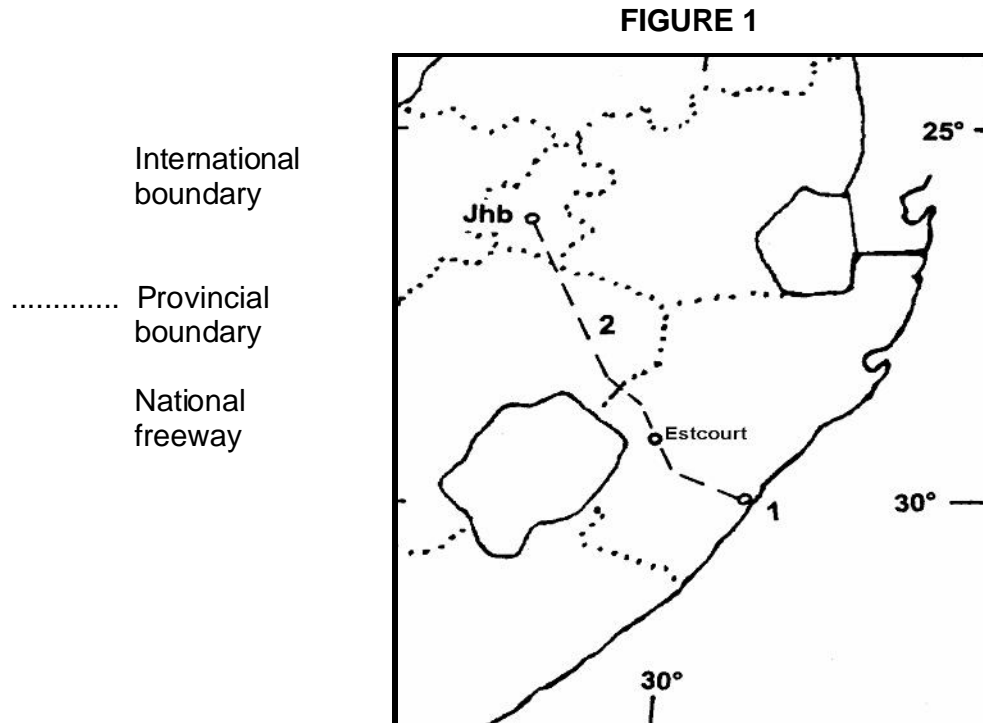
Boat Club	:	Bootklub	Nature Reserve	:	Natuurreservaat
Boesmans River	:	Boesmansrivier	Rail Route	:	Spoorroete
Furrow	:	Voor	Rifle Range	:	Skietbaan
Landing Strip	:	Landingstrook	Sewage Works	:	Rioolwerke
Monument	:	Monument	Weir	:	Stuwal / Uitkeerwal

---

---

**QUESTION 1**

Refer to **Figure 1**.

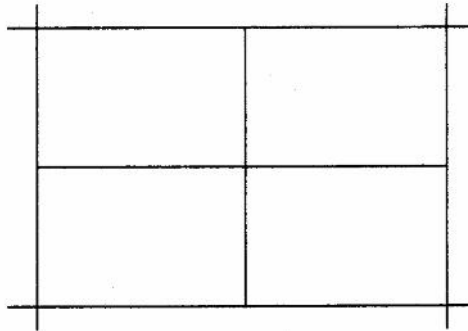


- 1.1 Name any TWO provinces bordering on the one in which Estcourt is located. (2)
  - 1.2 Give the number of the route marked **2**. Choose from **N1 / N2 / N3 / N4**. (1)
  - 1.3 Which TWO major industrial regions of South Africa are connected by this route (Question 1.2)? (2)
- [5]**

**QUESTION 2**

Study the topographical map and the orthophoto map.

- 2.1 Redraw the diagram (on the next page) in your answer book and explain the map index reference of the topographical map by labelling the lines of latitude and longitude and mark the position of the Estcourt map. (4)
- 2.2 Give the map index reference of the topographical map directly north of that to Estcourt. (1)



- 2.3 Compare the topographical map and the orthophoto map with each other.
- 2.3.1 Is the scale of the orthophoto map larger, the same or smaller than the scale of the topographical map? (1)
- 2.3.2 Explain your answer to Question 2.3.1. (2)
- 2.4 Calculate the distance of the railway line from the middle of the railway station in Estcourt (block A8) to Frere, a neighbouring town north-west of Estcourt. (5)
- 2.5 Calculate the magnetic declination of the map area for 2005. (4)
- 2.6 Calculate the magnetic bearing from spot height 1376 (block D7) to spot height 1292 (block B5). (3)
- [20]**

**QUESTION 3**

- 3.1 Study the landforms marked **O** (block G11), **P** (block B11) and **Q** (block A11).
- 3.1.1 Are these landforms associated with massive igneous rock **OR** inclined rock strata **OR** horizontal rock strata? (1)
- 3.1.2 Name the landforms marked **O**, **P** and **Q** respectively. (3)
- 3.1.3 Which **ONE** of the landforms, **P** or **Q**, has been exposed to erosion the longest? Explain your answer. 2x2= (4)
- 3.1.4 Which type of rocks are these landforms most probably consisting of. (2)
- 3.2 Sketch a labelled side view profile along the line **R** (block D3) to show the various slope forms. 2+4= (6)
- [16]**

**QUESTION 4**

- 4.1 The farming systems shown in blocks C4 and F3 differ from each other.
- 4.1.1 Is the farming system in block C4 most probably of a subsistence or a commercial type? Give TWO reasons to substantiate your answer. 1+(2x2)= (5)
- 4.1.2 Is the farming system in block F3 most probably of a subsistence or a commercial type? Give TWO reasons to substantiate your answer. 1+(2x2)= (5)
- 4.1.3 Which type of settlement pattern occurs in blocks C4 and F3 respectively? (2)
- 4.2 Study blocks A12, B12 and C12 on the topographical map.
- 4.2.1 Which environmental problem can be observed here? 1x2= (2)
- 4.2.2 According to the topographical map, what are the most probable causes of this problem? 2x2= (4)
- 4.2.3 What evidence on the topographical map indicates that attention has been given to this problem? 1x2= (2)
- [20]**

**QUESTION 5**

- 5.1 Refer to block F4.
- 5.1.1 What shape is shown by the settlement in block F4? (2)
- 5.1.2 Explain how this shape originated. 2x2= (4)
- 5.1.3 Classify the settlement as a wet-point or a dry-point settlement. (2)
- 5.2 The portions of the town marked **10** and **14** on the orthophoto map differ in age from each other.
- 5.2.1 Which area, **10** or **14**, is the younger and the older part respectively? (2)
- 5.2.2 Substantiate your answer for each of the areas **10** and **14**. 2x2= (4)
- 5.3 Study the areas marked **T** (block B8) and **S** (block B7) on the topographical map.
- 5.3.1 Which ONE of the areas, **T** or **S**, would you recommend for a future high-income residential area? (1)
- 5.3.2 Give TWO pieces of evidence from the topographical map to explain your answer to Question 5.3.1. 2x2= (4)
- [19]**

**TOTAL: 80**

**END**

**ADDENDUM TO TOPOGRAPHICAL MAP**

**Please refer to the colours of the topographical map.**

The colours of the map, especially the **brown**, are not quite true. Learners are advised to consult the key or reference at the bottom of the map.

**AARDRYKSKUNDE – VRAESTEL 2 – HG**

**ADDENDUM TOT TOPOGRAFIESE KAART**

**Verwys asseblief na die kleure op die topografiese kaart.**

Die kleure op die kaart, veral die **bruin**, is nie heeltemal korrek nie. Leerders word aangeraai om die sleutel of verklaring onderaan die kaart te raadpleeg.