



Province of the  
**EASTERN CAPE**  
EDUCATION

**NATIONAL  
SENIOR CERTIFICATE**

**GRADE 12**

**SEPTEMBER 2014**

**GEOGRAPHY P2**

**MARKS:** 75

**TIME:** 1½ hours

**NAME:** \_\_\_\_\_

		MARKS	MOD
Q1	15		
Q2	20		
Q3	25		
Q4	15		

TOTAL MARKS	MOD
75	75



This question paper consists of 14 pages including  
1 page for rough work and calculations.

**RESOURCE MATERIAL**

1. An extract from topographical map 3322 CA OUDTSHOORN.
2. Orthophoto map 3322 CA 10 OUDTSHOORN.
3. **NOTE:** The resource material must be collected by the schools for their own use.

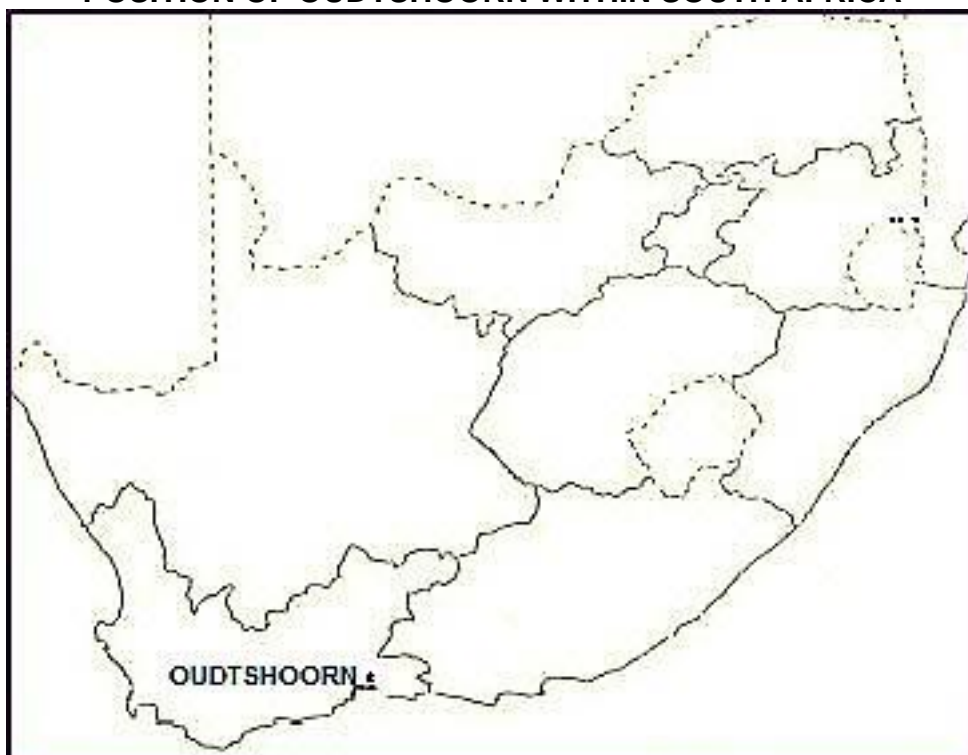
**INSTRUCTIONS AND INFORMATION**

1. Write your NAME in the space provided on the cover page.
2. Answer ALL the questions in the spaces provided on this question paper.
3. You are supplied with a 1 : 50 000 topographical map 3322 CA of OUDTSHOORN and an orthophoto map of a part of the mapped area.
4. You must hand in the topographical map and the orthophoto map to the invigilator at the end of this examination session.
5. You must use the blank page at the back of this paper for all rough work and calculations. DO NOT detach this page from the question paper.
6. Show ALL calculations and formulae, where applicable. Marks will be awarded for this.
7. You may use a non-programmable calculator.
8. A glossary of some of the English and Afrikaans words and their translations appears on the following page.

**GLOSSARY**  
(SOME OF THESE TERMS MAY APPEAR ON THE MAPS)

ENGLISH	AFRIKAANS
Canal	Kanaal
Diggings	Uitgrawings
Brickfields	Steenwerke
Cemetery	Begraafplaas
Caravan Park	Karavaanpark
Golf Course	Gholfbaan
Furrow	Voor
Hospital	Hospitaal
Rifle Range	Skietbaan
Game Park	Wildspark
Hiking Trail	Voetslaanpad
Sewage Disposal Works	Rioolverwerkingsaanleg
Tourist Camp	Toeriste kampeerterrein
Showgrounds	Skougronde
Race Track	Renbaan
Drive-in theatre	Inry-teater
Aerodrome	Vliegveld

**POSITION OF OUDTSHOORN WITHIN SOUTH AFRICA**



**SECTION A****QUESTION 1: MULTIPLE-CHOICE QUESTIONS**

The following statements are based on the 1 : 50 000 topographical map 3322 CA OUDTSHOORN, as well as the orthophoto map of a part of the mapped area. Various options are provided as possible answers to the following statements. Choose the correct answer and write only the letter (A–D) in the block next to the statement.

- 1.1 The map reference north east of the topographical map of 3322 CA Oudtshoorn, is ...

A 3222 AC.  
B 3321DB.  
C 3321 BD.  
D 3322 AD.

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

A 5  
B 10  
C 20  
D 2

- 1.3 The type of stream channel of the Olifants River found at **A** in block **I6/7** on the topographical map is ...

A meandering.  
B braided.  
C non-perennial.  
D straight.

- 1.4 Identify the constructed/human made feature **8** on the orthophoto map.

A School  
B Factory  
C Bus station  
D Railway station

- 1.5 The location (co-ordinates) of the trigonometrical station number **307** in block **D9** is ...

A 22°09'39"E 33°33'55"S / 22°09,7'E 33°33,9'S.  
B 33°36'10"S 22°11'25"E / 33°36,2'S 22°11,4'E.  
C 33°33'55"S 22°08'39"E / 33°33,9'S 22°08,7'E.  
D 33°03'55"E 22°09'39"S / 33°03,9'E 22°09,7'S.

1.6 The type of rural settlement pattern found at **B** in block **C14** on the topographical map is ...

- A dispersed.
- B linear.
- C nucleated.
- D irregular.

☐

1.7 The landform in the vicinity of **C** in block **C12** on the topographical map is a ...

- A gorge.
- B saddle.
- C waterfall.
- D spur.

☐

1.8 Altitude (height) in block **I15** is represented by ...

- A a benchmark and contour lines.
- B a spot height and a bench mark.
- C a trigonometrical station and a bench mark.
- D contour lines and a spot height.

☐

1.9 The race track in block **F11** is found in the ... on the topographical map.

- A CBD
- B rural-urban fringe
- C residential area
- D slum area

☐

1.10 The map projection used on the orthophoto map is ...

- A Universal Transverse.
- B Lambert.
- C Gauss Conform.
- D Mercator.

☐

1.11 The feature marked **2** on the orthophoto map is a ...

- A dam.
- B sewage disposal works.
- C furrow.
- D water reservoir.

☐

1.12 The feature found at **D** (block **D3**) on the topographical map is ...

- A erosion.
- B a dry pan.
- C sand.
- D a prominent rock outcrop.

☐

1.13 The secondary economic activity taking place at **3** on the orthophoto map is ...

- A farming.
- B manufacturing.
- C sewerage works.
- D education.

☐

1.14 The dams that are found in the rural areas of Oudtshoorn are mainly used for ...

- A recreation.
- B domestic purposes.
- C industrial purposes.
- D irrigation.

☐

1.15 The rows of trees (block **H12**) found close to the farms along the Oliphant's River are ...

- A demarcations of farmland.
- B protection for the riverbanks.
- C plantations.
- D windbreaks.

☐

(15 x 1) (15)

**TOTAL SECTION A: 15**

## SECTION B

## QUESTION 2: MAPWORK TECHNIQUES AND CALCULATIONS

- 2.1 Calculate the distance of the Oudtshoorn runway from point **4** to point **5** on the orthophoto map. Show ALL the calculations. Express your answer in kilometres.

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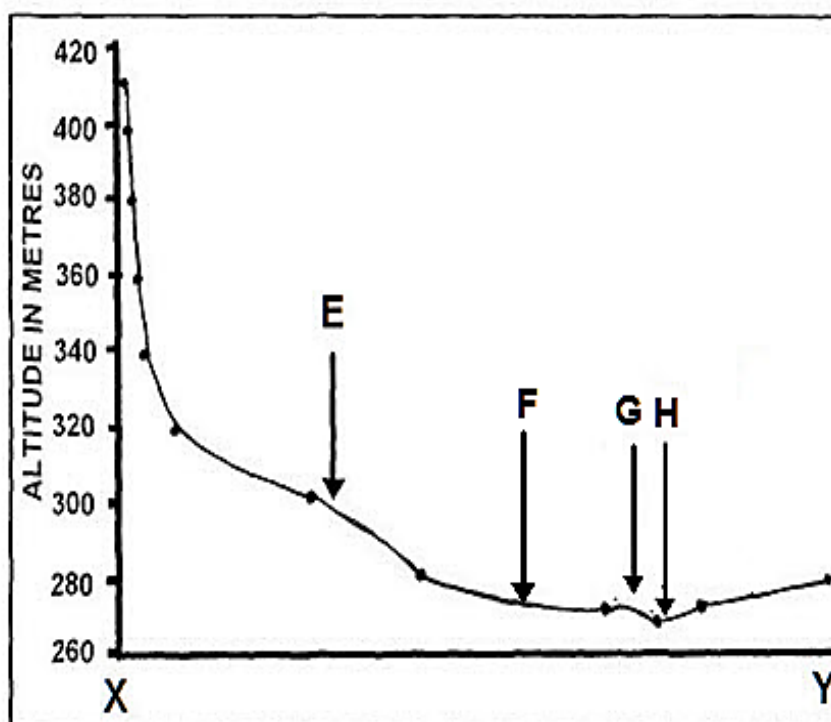


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(3)

- 2.2 The following cross-section was drawn overlooking the Oliphant's River from point **X** (block **K8**) to point **Y** (block **I9**) on the topographical map.

- 2.2.1 Use the topographical map to identify the features **E**, **F**, **G** and **H** on the cross-section.



(4)

- 2.2.2 What is the horizontal scale of the cross-section above?

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(1)

2.2.3 Name the type of slope found between **X** and **Y**.

\_\_\_\_\_ (1)

2.3 Calculate the vertical exaggeration of the cross-section, with a vertical scale of 1 cm to represent 20 m, and by using the horizontal scale in the answer to QUESTION 2.2.2 above.

Show ALL your calculations.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (5)

2.4 The Oudtshoorn aerodrome is located in block **G12** on the topographical map.

From which direction do planes land at the aerodrome?

\_\_\_\_\_ (1)

2.5 Calculate the present magnetic declination in the mapped area.

Show ALL your calculations.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (5)

**TOTAL SECTION B: 20**



**SECTION C****QUESTION 3: MAP INTERPRETATION AND ANALYSIS**

3.1 Suggest TWO factors that favoured the siting of Oudtshoorn.

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(2 x 1) (2)

3.2 What type of town is Oudtshoorn classified as?

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(1 x 1) (1)

3.3 Explain how the farming community surrounding Oudtshoorn relies on the town for survival.

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(2 x 2) (4)

3.4 Give ONE reason, visible on the orthophoto map, why this specific location marked **6** was selected for the cemetery.

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(1 x 2) (2)

3.5 Commercial farming occurs along the Olifants River.

3.5.1 Explain any TWO factors (besides the factors related to water supply), that favoured this (commercial) type of farming.

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(2 x 2) (4)

- 3.5.2 How do farmers access water from the Oliphant's River (blocks **H9/10**) for their farms?

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(1 x 1) (1)

- 3.6 3.6.1 Identify the primary economic activity labelled **I** found at Safari in block **H10** on the topographical map.

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(1 x 1) (1)

- 3.6.2 Explain ONE way in which this activity (answer to QUESTION 3.6.1) contributes to the economy of Oudtshoorn.

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(1 x 2) (2)

- 3.7 State ONE measure used by engineers in the construction of the railway line to overcome the uneven topography.

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(1 x 2) (2)

- 3.8 Compare the street pattern at **1** to that of **7** on orthophoto map in terms of the following:

	<b>1</b>	<b>7</b>
<b>STREET PATTERN</b>		
<b>DISADVANTAGE</b>		

(4 x 1) (4)

3.9 Refer to blocks **B11/12** on the topographical map.

3.9.1 Identify the type of drainage pattern **E**.

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(1 x 1) (1)

3.9.2 What type of underlying rock structure is responsible for this pattern at **E**?

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(1 x 1) (1)

**TOTAL SECTION C: 25**

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

- 4.1 Match a statement in COLUMN A with a concept from COLUMN B. Write only the letter (A–F) of the correct term next to the number (4.1.1–4.1.5) as given below, for example 4.1.6 G.

<b>COLUMN A</b>		<b>COLUMN B</b>	
4.1.1	data that can be shared by different organisations	A	Raster method
4.1.2	geographical positioning system	B	Data sharing
4.1.3	the observation of the earth from a distance using satellites to gather information	C	Spatial resolution
4.1.4	a method of storing GIS data as rectangular grid cells/pixels	D	GPS
4.1.5	the detail with which a map depicts the location and shape of the feature	E	Remote sensing
		F	Data analysis

(5 x 1) (5)

4.1.1 \_\_\_\_\_ (1)

4.1.2 \_\_\_\_\_ (1)

4.1.3 \_\_\_\_\_ (1)

4.1.4 \_\_\_\_\_ (1)

4.1.5 \_\_\_\_\_ (1)

- 4.2 Image **5** on the orthophoto map has a poor resolution. How can we use GIS to improve the clarity of the photographed image?

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(1 x 2) (2)

4.3 The following questions refer to the Greystone Game Park in block **F4** on the topographical map, which makes use of GIS systems to help manage the sustainability of the reserves.

4.3.1 Name the GIS data manipulation process that the green shading represents.

\_\_\_\_\_  
(1 x 1) (1)

4.3.2 Give TWO explanations of the significance of the green shading around the Greystone Game Park.

\_\_\_\_\_  
\_\_\_\_\_  
(2 x 2) (4)

4.3.3 You are tasked to create an attribute table for the Greystone Game Park in block **F4**. Name THREE attributes you would consider including in your GIS.

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

(3 x 1) (3)

**TOTAL SECTION D: 15**  
**GRAND TOTAL: 75**

**ROUGH WORK AND CALCULATIONS**



