



Province of the  
**EASTERN CAPE**  
EDUCATION

## NATIONAL SENIOR CERTIFICATE

**GRADE 11**

**NOVEMBER 2011**

**GEOGRAPHY P2**

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

MARKS: 100

TIME: 1½ hours

		MARKS	MOD
Q1	20		
Q2	20		
Q3	40		
Q4	20		

TOTAL MARKS	MOD
<b>100</b>	<b>100</b>



\* G E O G E 2 \*

This question paper consists of 10 pages.

**INSTRUCTIONS AND INFORMATION**

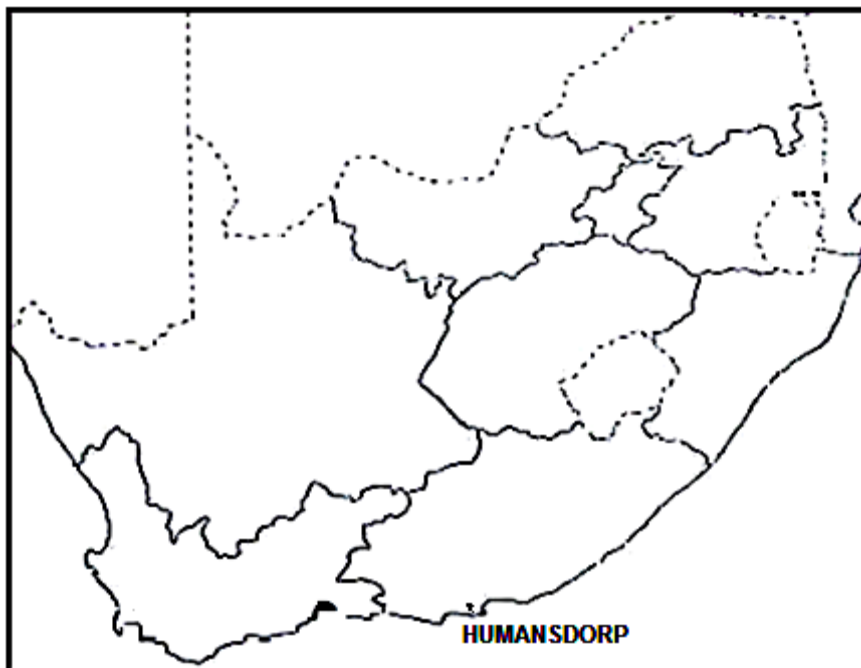
1. Write your NAME in the space provided on the cover page.
2. Answer ALL the questions in the spaces provided ON THIS QUESTION PAPER.
3. You are supplied with a 1:50 000 topographical map (3424 BB HUMANSDORP) and an orthophoto map (3424 BB 1 HUMANSDORP) of a part of the mapped area.
4. The topographical map and the orthophoto map must be handed over to the invigilator at the end of the examination session.
5. NOTE: The resource material (topographical map and orthophoto map) must be collected by the schools for their own future use.
6. A non-programmable calculator may be used.
7. The following English terms or their Afrikaans translations are shown on the 1:50 000 topographical map.

**ENGLISH**

Diggings  
Caravan Park  
Sewage Works  
River Mouth  
Golf Course  
Wetland

**AFRIKAANS**

Uitgrawings  
Karavaanpark  
Rioolwerke  
Riviermond  
Gholfbaan  
Vlei

**POSITION OF HUMANSDORP WITHIN SOUTH AFRICA**

**SECTION A**

**QUESTION 1: MULTIPLE-CHOICE QUESTIONS**

The following statements are based on the 1:50 000 topographical map 3424 BB HUMANSDORP and the orthophoto map of the same 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 contour interval on the topographical map is ...

- A 20 m
- B 50 m
- C 5 m
- D 2 m

1.2 The reference number of the topographic map directly north west of the map 3424 BB Humansdorp is ...

- A 3424 BA.
- B 3324 DC.
- C 3424 BC.
- D 3324 DD.

1.3 The geomorphological feature found along the line 3 – 4 on the orthophoto map is a ...

- A spur.
- B cliff.
- C waterfall.
- D valley.

1.4 The approximate altitude of the cemetery at 9 on the orthophoto map is ...

- A 128 m.
- B 120 m.
- C 132 m.
- D 110 m.

1.5 The functional zone marked 10 on the orthophoto map indicates ...

- A a residential zone.
- B a zone of manufacturing industries.
- C a cemetery.
- D a high income residential area.

1.6 Constructive waves found at block F10 are ...

- A strong back wash.
- B weak swash.
- C plunging breakers.
- D spilling breakers.

1.7 What is the recreational facility found at 34°02'20"S and 24°55'10"E on the topographical map?

- A Caravan Park
- B Model aircraft club
- C Golf course
- D School

1.8 The exact straight line distance between point 13 and 10 on the orthophoto map is ...

- A 890 m.
- B 17 km.
- C 1,78 km.
- D 1780 km.

1.9 The scale of the topographical map (1:50 000) is ... than that of the orthophoto map (1:10 000).

- A 5 times smaller
- B 5 times larger
- C 40 times smaller
- D 40 times larger

1.10 The contour interval of the orthophoto map is ...

- A 5 m.
- B 20 m.
- C 10 m.
- D 25 m.

(10 x 2) (20)

**TOTAL SECTION A: 20**

**SECTION B**

**QUESTION 2: MAPWORK TECHNIQUES AND CALCULATIONS**

2.1 A fishing vessel hits the coastal rocks at Seekoeipunt (block E11) and a rescue boat is launched from Q (block F10) on the topographical map.

2.1.1 What is the true bearing from Q to Seekoeipunt (block E11) where the stricken vessel is found?

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(2)

2.1.2 The sea rescue boat travelled at 60 km / hour. How long did it take to reach the fishing vessel from Q to Seekoeipunt (block E11)?

$$\text{Time} = \frac{\text{Distance}}{\text{Speed}}$$

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(5)

2.2 Calculate the magnetic bearing from P to Q for the year 2011.

Difference in years =

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Mean annual change until 2011...=

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MD for 2011 =

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Magnetic bearing = TB + MD

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(6)

- 2.3 Calculate the average gradient from the trigonometrical  $\Delta$  station 292 (block D9) to Q (block F10) on the topographical map. Use the formula below.

$$\text{Gradient} = \frac{\text{VI}}{\text{HE}} \quad \frac{\text{(Vertical Interval)}}{\text{(Horizontal Equivalent)}}$$

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(5)

- 2.4 What manmade structures, blocks the view between the trigonometrical  $\Delta$  station 292 (block D9) and Q (block F10) on the topographical map?

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(2)

**TOTAL SECTION B: 20**

**SECTION C**

**QUESTION 3: MAP INTERPRETATION AND ANALYSIS**

3.1 The Indian Ocean plays a major role in determining the climate of Jeffrey's Bay.

3.1.1 Explain TWO ways in which the Indian Ocean influences the climate of the area.

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(2 x 2) (4)

3.1.2 Does the mapped area receive seasonal rainfall or rainfall throughout the year?

(1)

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(1 x 1)

3.1.3 Give ONE reason for your answer.

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(1 x 2) (2)

3.2 3.2.1 Farming in the block E8 on the topographical map consists of intensive production (developed farms). Provide TWO pieces of evidence to support this statement.

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(2 x 2) (4)

3.2.2 List TWO factors favouring farming in the area.

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(2 x 2) (4)

3.3 3.3.1 Identify the physical feature at X on the topographical map.

\_\_\_\_\_ (1 x 2) (2)

3.3.2 Explain the importance of the above feature for the environment.

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

3.4 Explain how longshore drift / beach migration would occur in the region of Q (block F10) with a prevailing Southwest wind.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (4 x 1) (4)

3.5 Identify the geomorphological feature across the Seekoeiriviermond in block F10 on the topographical map.

\_\_\_\_\_ (1 x 2) (2)

3.6 Name TWO factors that will affect the size of the waves in the coastal area shown on the topographical map.

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



3.7 The Humansdorp / Jeffreys Bay areas have been intensely used for tourism / ecotourism. Justify this statement by giving THREE features from the map.

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_

(3 x 2) (6)

3.8 Refer to the topographical map and list THREE services that Humansdorp provide for its inhabitants.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(3 x 1) (3)

**TOTAL SECTION C: 40**

**SECTION D**

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

4.1 4.1.1 Explain what a Geographical Information Systems (GIS) is.

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(1 x 2) (2)

4.1.2 Name any TWO components of GIS.

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(2 x 2) (4)

4.2 Classify the following data as vector or raster.

4.2.1 An image:

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(2)

4.2.2 Polygons:

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(2)

4.3 How does data acquisition differ from data input?

4.3.1 Data acquisition:

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(2)

4.3.2 Data input:

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(2)

4.4 Explain any THREE examples or ways that GIS can be used to improve or influence everyday life for South Africans.

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(3 x 2) (6)

**TOTAL SECTION D: 20**

**GRAND TOTAL: 100**