basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 10

GEOGRAPHY P2

EXEMPLAR 2012

MARKS: 75

TIME: 1½ hours

LEARNER'S NAME	

TOTAL	15	20	25	15	75
MARK SCORED					
MARKER					
MODERATOR					

This question paper consists of 9 pages and 1 page for rough work.

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RESOURCE MATERIAL

1. An extract from topographical map 3424BB HUMANSDORP.

2. Orthophoto map 3424BB 1 HUMANSDORP.

3. NOTE: The resource material must be collected by the school 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 in this question paper.

3. You are supplied with a 1:50 000 topographical map 3424BB HUMANSDORP and an orthophoto map of a part of the mapped area.

4. You must hand 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 the formulae where applicable. Marks will be allocated for this.

7. You may use a non-programmable calculator.

8. The following English terms or their Afrikaans translations are shown on the topographical map.

ENGLISH	**AFRIKAANS**
Diggings	Uitgrawings
Caravan Park	Karavaanpark
Sewage Works	Rioolwerke
River Mouth	Riviermond
Golf Course	Gholfbaan
Wetland	Vlei

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QUESTION 1: MULTIPLE-CHOICE QUESTIONS

The questions below are based on the 1:50 000 topographical map 3424BB HUMANSDORP, as well as the orthophoto map of a part of the mapped area. Various options are provided as possible answers to the following questions. Choose the answer and write only the letter (A–D) in the block next to each question.

1.1 The map reference of the topographical map north of Humansdorp is ...

A 3325AA.
B 3424BD.
C 3324DD.
D 3424BA.

1.2 The topographical map number 3424 refers to …

A contours and isobars.
B isobars and contours.
C longitude and latitude.
D latitude and longitude.

1.3 The types of scales used on the topographical map are:

(i) Ratio
(ii) Fraction
(iii) Word
(iv) Line

Choose the correct combination:

A (i) and (ii)
B (ii) and (iii)
C (iii) and (iv)
D (i) and (iv)

1.4 The scale of the orthophoto map is … times larger than the scale of the topographical map.

A 5
B 10
C 20
D 40

1.5 The contour interval of the orthophoto map is … metres.

A 5
B 10
C 20
D 50

1.6 Contour lines, trigonometrical stations, spot heights and benchmarks represent …

A lines joining places of equal height.
B places of similar vegetation.
C altitude (height above sea-level).
D lines joining places of equal temperature.

1.7 The road on the topographical map that links Humansdorp with Jeffrey's Bay is the …

A R102.
B R330.
C N2.
D N12.

1.8 The exact height of **T** in block **A5** on the topographical map is … metres.

A 20
B 200
C 2 000
D 20 000

1.9 The human-made feature found at **W** in block **A7** on the topographical map is a …

A dam wall
B bridge.
C railway.
D waterfall.

1.10 The feature found at **1** on the orthophoto map is a/an …

A cemetery.
B small dam.
C excavation.
D orchard.

1.11 The physical/natural feature found at **X** in block **F4/5** on the topographical map is a ...

A dam.
B waterfall.
C marsh and vlei.
D river island.

1.12 The main method used to transport water to the agricultural land in block **F3** on the topographical map is by means of …

A wind pumps.
B pipelines.
C canals.
D furrows.

1.13 The feature marked **3-4** on the orthophoto map is a ...

A spur.
B valley.
C saddle.
D ridge.

1.14 The feature labelled **10** on the orthophoto map is a/an …

A house.
B industry.
C school.
D church.

1.15 The slope marked **5-6** on the orthophoto map is …

A concave.
B convex.
C terraced.
D even.

(15 x 1) **[15]**

QUESTION 2: MAP CALCULATIONS

2.1 Calculate the straight-line distance along the N2 between benchmark 209 (**A3/4**) and the Plettenberg Bay exit point (**A1**) in kilometres.

_____

_____

_____

. _____

_____

_____ (3)

2.2 Give the following:

2.2.1 The compass direction between spot height 25 in block **H6** and trigonometrical station 124 in block **H6/7** on the topographical map

_____ (1)

2.2.2 The true bearing between spot height 25 in block **H6** and trigonometrical station 124 in block **H6/7** on the topographical map

_____ (1)

2.3 Which ONE, compass direction or true bearing, is a more accurate way of indicating direction? Give ONE reason for your answer.

Answer: _____

Reason:_____

_____ (2)

2.4 With the aid of a simple diagram, explain how the map 3424BB HUMANSDORP was named.

_____

_____

_____

_____ (8)

2.5 Give the exact coordinates of spot height 77 in block **E2**.

_____ (4)

2.6 By how much must the 3424BB HUMANSDORP topographical map be enlarged to be the same size as reality?

_____ (1)
[20]

QUESTION 3: APPLICATION AND INTERPRETATION

3.1 You are a first-time hiker who is not very fit. You can choose to hike from point **4** to point **3** or from point **6** to point **5**.

3.1.1 Which ONE will you choose?

_____
(1 x 2) (2)

3.1.2 Give a reason for your answer to QUESTION 3.1.1.

_____

_____
(1 x 3) (3)

3.2 Distinguish between the Krom River in block **G2** and the Kamste River in block **E6** by indicating which one is perennial/permanent and which one is non-perennial/periodic.

_____

_____
(1 x 2) (2)

3.3 Indicate the flow direction of the Seekoei River running through Broadlands in block **D2** and give a reason for your answer.

Direction: _____

Reason: _____
(2 x 2) (4)

3.4 Give ONE piece of evidence from the topographical map to show that nature conservation is a priority in the mapped area.

_____
(1 x 2) (2)

3.5 No rivers flow through block **B8**. Name ONE method that farmers have used to obtain water in the area.

_____
(1 x 2) (2)

3.6 Many people visit Jeffrey's Bay during the summer holiday. The huge number of visitors may lead to pollution of the ocean. Name ONE source of pollution by the visitors and ONE effect it will have on the ocean environment.

_____

_____

(2 x 2) (4)

3.7 The Seekoei River can overflow its blanks during heavy rains. Give TWO negative effects that may be experienced in the area adjacent to the river as it flows to the ocean.

_____

_____

(2 x 2) (4)

3.8 Imagine you are a tourist information officer. You must compile a tourist brochure for Humansdorp and the surrounding areas. Name ONE important attraction which you will include in the brochure.

_____

_____

(1 x 2) (2)
[25]

QUESTION 4: GEOGRAPHIC INFORMATION SYTEMS

4.1 Write the acronym *GIS* in full.

_____

(1 x 1) (1)

4.2 Name any ONE component of a GIS.

_____

(1 x 2) (2)

4.3 Choose a term from COLUMN B that matches a statement in COLUMN A. Write only the letter (A–E) next to the number (1–4) below.

COLUMN A	COLUMN B
1. The science of acquiring information about the earth's surface without actually being in contact with it	A spatial data B points
2. A real world phenomenon of which the location and/or shape can be described in terms of a spatial reference system	C lines D spatial objects
3. Data described in terms of location or grid reference	E remote sensing
4. The type of symbol cartographers use to describe roads, rivers and railways	

1 _____

2 _____

3 _____

4 _____

(4 x 1) (4)

4.4 Spatial data can be managed as points, lines or polygons. Name ONE line feature in block **A3**.

_____

(1 x 2) (2)

4.5 Name ONE attribute of the N2 running from west (block **A1**) to east (block **A10**) across the topographic map.

_____

(1 x 2) (2)

4.6 Why was GIS developed?

_____

_____

(2 x 2) (4)

[15]

TOTAL: 75

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ROUGH WORK AND CALCULATIONS

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