

**HILLCREST HIGH SCHOOL
GRADE 10
GEOGRAPHY PAPER II
NOVEMBER 2011**

TIME : 90 minutes

MARKS : 80

EXAMINER : Mr CM Girvin

INSTRUCTIONS

1. Answer all the questions in the spaces provided in this question paper
 2. All the questions are based on the topographical map 3424BB Humansdorp and the ortho – photograph of a part of the mapped area
 3. Show all calculations as marks are allocated for these
-

QUESTION 1 : MULTIPLE CHOICE

Various options are provided as possible answers to the questions below. Choose the correct answer and **CIRCLE IT CLEARLY**

- 1.1 The earth's curved surface is represented on the topographical map through the _____ projection
- | | |
|------------|-----------------|
| A Mercator | B Gauss Conform |
| C Lambert | D Transversal |
- 1.2 The landform found at P in block B11 is a _____
- | | |
|-----------------|----------------|
| A rocky outcrop | B cape |
| C sandy beach | D coastal rock |
- 1.3 The main primary activity in the mapped area is _____
- | | |
|-----------|------------|
| A farming | B mining |
| C fishing | D forestry |
- 1.4 The south slope of Kwa Nomzamo (C2) is _____
- | | |
|----------|-----------|
| A gentle | B steep |
| C convex | D concave |
- 1.5 An aerial photograph that shows contour lines, spot heights, trigonometrical stations and other labelled features is called a/an _____
- | | |
|-----------------------------|-------------------------|
| A oblique aerial photograph | B topographical map |
| C orthophoto map | D vertical aerial photo |
- 1.6 The distance from the church in Wavecrest (B11) to the post office in Jeffreys Bay is _____ km
- | | |
|-------|-------|
| A 2.8 | B 2.2 |
| B 3 | D 4,5 |
- 1.7 The index of the map sheet northwest of Humansdorp is _____
- | | |
|----------|----------|
| A 3324DC | B 3324DD |
| C 3325CC | D 3424BA |

- 1.8 The co – ordinates of the trigonometrical station 140 in block B3 are _____
- | | | | | | |
|---|------------|------------|---|------------|------------|
| A | 34°01'20"S | 24°47'44"E | B | 34°02'40"S | 24°48'16"E |
| C | 34°01'20"E | 24°47'44"S | D | 34°02'40"E | 24°48'16"E |
- 1.9 The feature labelled 1 on the orthophoto map is a _____
- | | | | |
|---|--------------|---|--------------|
| A | soccer field | B | sewage works |
| C | dam | D | marsh |
- 1.10 The scale of the orthophoto map is _____ than that of the topographical map
- | | | | |
|---|-----------------|---|------------------|
| A | 5 times smaller | B | 5 times larger |
| C | 40 times larger | D | 40 times smaller |

10 X 2 = [20]

QUESTION 2 : MAP SKILLS

- 2.1 Calculate the magnetic declination for 2011

(4)

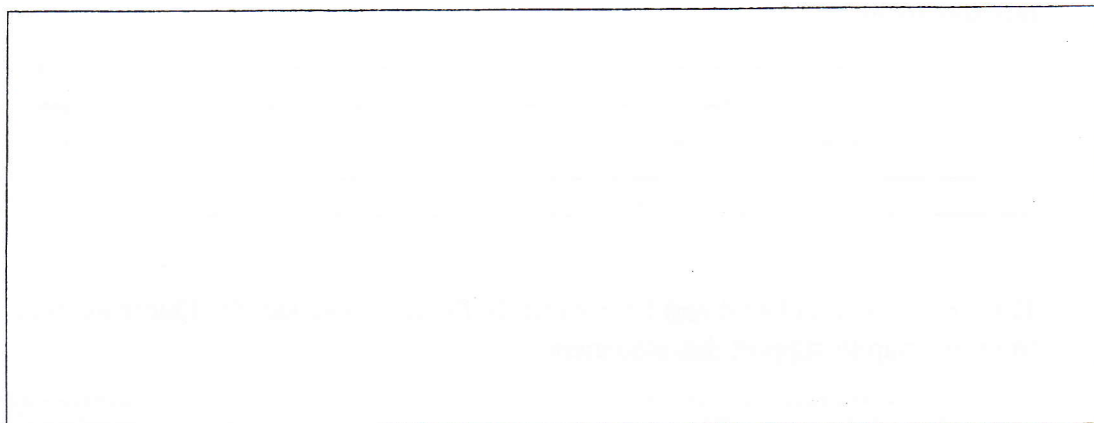
- 2.2 Determine the magnetic bearing of trigonometrical station 94 in block E1 **FROM** spot height 97 in block D1 for 2011

(4)

- 2.3 Calculate the average gradient of the slope from trigonometrical station 292 (D9) to Seekoeipunt (E11)

(4)

- 2.4 Draw a **FREE – HAND** (ie. rough) cross – section from trigonometrical station 93 (F7) to dam 21 (H5) on the topographical map



(4)

- 2.5 Imagine that your cross section has a vertical scale of 1 cm represents 50m. Calculate the vertical exaggeration of the cross – section

(4)

- 2.6 What is the height of the dam wall marked W in blocks F1 and F2 of the topographical map?

(2)

- 2.7 Block E1 on the topographical map is covered by cultivated land. Calculate it's area

(4)

- 2.8 How long would it take a vehicle travelling at 60km/h to travel along the section of the N2 shown on this map?

(4)

[30]

3. INTERPRETATION

- 3.1 The mapped area is obviously very wet. Give **TWO** pieces of evidence to support this statement

(4)

- 3.2 The streams in blocks F4 and F5 are clearly flowing very slowly. Quote evidence from the map to support this statement

(2)

- 3.3 Krombaai (I6) is often visited by local tourists. Name **TWO** recreational activities these tourists could engage in during their stay at this resort

(4)

- 3.4 Identify the landform labelled 3 – 4 on the orthophoto map

(2)

- 3.5 In which province is Humansdorp located?

(2)

- 3.6 Refer to the orthophoto map. What street name is given to the R102 where it runs through Humansdorp?

(2)

[16]

4. GEOGRAPHIC INFORMATION SYSTEMS (GIS)

- 4.1 Identify a polygon feature and a line feature in block C2

Polygon feature _____

Line feature _____

(4)

4.2.1 Define the term **ATTRIBUTE DATA**

(2)

4.2.2 Name **ONE** attribute of the N2 in block A2

(2)

4.3 GIS allows us to use thematic layers on maps. Refer to the topographical map and name **ONE** layer of information that was used when compiling the map of Humansdorp

(2)

4.4 The Hip Hop Joint company wants to open up a new store in Jeffreys Bay. Suggest **TWO** ways in which GIS can be used to assist with the location of the store.

(4)
[14]

TOTAL : 80