



education

Department:
Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 10

**GEOGRAPHY P2
EXEMPLAR PAPER**

CENTRE NUMBER:

EXAMINATION NUMBER:

MARKS: 75

TIME: 1,5 hours

This question paper consists of 9 pages.

147 2 E

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RESOURCE MATERIAL:

- An extract from the topographic map 2826BB VIRGINIA
- Orthophoto map 2826 BB 14 MELODING

NOTE: The resource material must be collected by the schools for their own further use.

INSTRUCTIONS AND INFORMATION

1. Write your centre and examination numbers in the spaces provided.
2. Answer ALL the questions on this question paper.
3. Number the answers correctly according to the numbering system used in this question paper.
4. Candidates should study the 1:50 000 TOPOGRAPHIC MAP 2826BB VIRGINIA and the ORTHOPHOTO MAP 282BB 14 MELODING before attempting to answer the questions.
5. The features on the topographical map are indicated by letters and the features on the orthophoto map by numbers.

The following English terms or their Afrikaans translations are shown on the 1:50 000 topographic map.

ENGLISH	AFRIKAANS
Canal/Furrow	Voor
Cemetery	Begraafplaas
Hospital	Hospitaal
Mine	Myn
Shaft	Skag
Camping site	Kampeerterein
Slimes dam	Slikdam
Golf course	Gholfbaan
Limestone	Kalksteen
Drive-in theatre	Inryteater
Aerodrome/Airport	Vliegveld
Siphon	Oortappunt
River	Rivier
North	Noord
Show grounds	Skougronde
Weir	Stuwal

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QUESTION 1

Various possible options are provided as answers to the following questions. Choose the correct answer and write the letter (A - D) in the block next to the question (1.1 - 1.10).

1.1 Virginia is located in the ... Province.

- A Gauteng
- B Northern Cape
- C KwaZulu-Natal
- D Free State

☐

1.2 The mean magnetic declination in July 2001 was ... west of true north.

- A 19° 20'
- B 19° 44'
- C 19° 32'
- D 07° 32°

☐

1.3 The road R73 to the north-west of Virginia leads to ...

- A Hennenman.
- B Winburg.
- C Theunissen.
- D Welkom.

☐

1.4 The two primary economic activities which are predominant (are most important) in this region are ...

- A mining and agriculture.
- B mining and fishing.
- C agriculture and forestry.
- D mining and forestry.

☐

1.5 The altitude of Virginia is ... metres.

- A approximately 1 400
- B 2 826
- C between 1 300 and 1 340
- D between 1 280 and 1 300

☐

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1.6 On the 1:50 000 map to the south-west of the 2826BB Virginia topographical map, is ...

- A 2827AC.
- B 2826BC.
- C 2727CC.
- D 2726DC.

☐

1.7 Choose the INCORRECT answer below.

It is easier to interpret the information on an orthophoto map than on a 1:50 000 map, because ...

- A the scale of the orthophoto map is larger.
- B the names of certain features are printed on the orthophoto map.
- C the contour interval on the orthophoto map is 20 metres.
- D contour lines are printed on the orthophoto map.

☐

1.8 The contour interval on the topographical map is ... metres.

- A 30
- B 50
- C 10
- D 20

☐

1.9 The type of farming which predominates in the region depicted (shown) on the orthophoto map and the topographical map is ... farming.

- A milk
- B commercial grain
- C subsistence
- D fruit

☐

1.10 The dominating (most important) mineral mined in the area is ...

- A gold.
- B copper.
- C diamonds.
- D coal.

☐

(10 x 2) [20]

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QUESTION 2

- 2.1 Calculate the distance in km of the stretch of the road numbered 9 on the orthophoto map. Show ALL the calculations.

(4 x 1) (4)

- 2.2 Feature C (block E10) indicates a wetland on the farms Bloemhoek en Doornrivier. Why is it important that wetlands should be preserved and not used for cultivation?

(1 x 2) (2)

- 2.3 Identify and name the following physical features on the topographic map:

- 2.3.1 A: (block C11) the erosion feature

(1 x 2) (2)

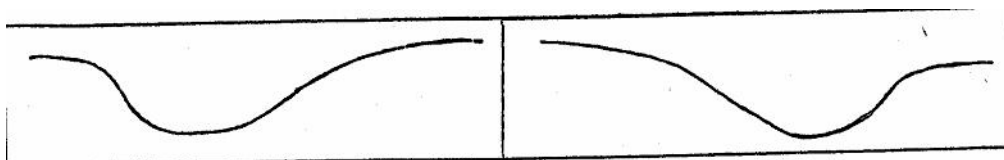
- 2.3.2 J: (block K11) the type of river (permanent, periodic or episodic)

(1 x 2) (2)

- 2.3.3 N to O: Select the correct cross-section drawing, (i) OR (ii).

(i)

(ii)



(1 x 2) (2)

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2.3.4 Name THREE tributaries of the Sand River.

_____ (3 x 2) (6)

2.4 Locate the farm Nuwemoed at the following co-ordinates (position) and answer the following questions:

28° 07' 12" S
26° 57' 15" O

2.4.1 What type of farming (intensive or extensive) is practised on Nuwemoed?

_____ (1)

2.4.2 Give TWO characteristics of this type of farming to support your answer in QUESTION 2.4.1.

_____ (2 x 2) (4)

2.4.3 Why is there no cultivation in the area between the canal and the Sand River? Give ONE possible reason.

_____ (1 x 2) (2)

2.5 2.5.1 Calculate the gradient from spot height 1366 (block G10) to trigonometrical station 32 (block D9).

_____ (4 x 1) (4)

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2.5.2 Choose ONE of the following sentences to describe the gradient which you have calculated in QUESTION 2.5.1:

- (a) The gradient is very steep.
- (b) The gradient is relatively steep.
- (c) The gradient is very gentle.

_____ (1 x 2) (2)
[31]

QUESTION 3

3.1 Identify the cultural (man-made) features 1, 2 and 6 as indicated on the ortho-photo map.

_____ (3 x 2) (6)

3.2 Study the area in and around Virginia. Name THREE recreational activities available to the residents of Virginia.

_____ (3 x 2) (6)

3.3 There is widespread damage to the environment due to the mining activities around Virginia. How can this damage to the environment be rectified or stopped? Make ONE suggestion.

_____ (1 x 2) (2)

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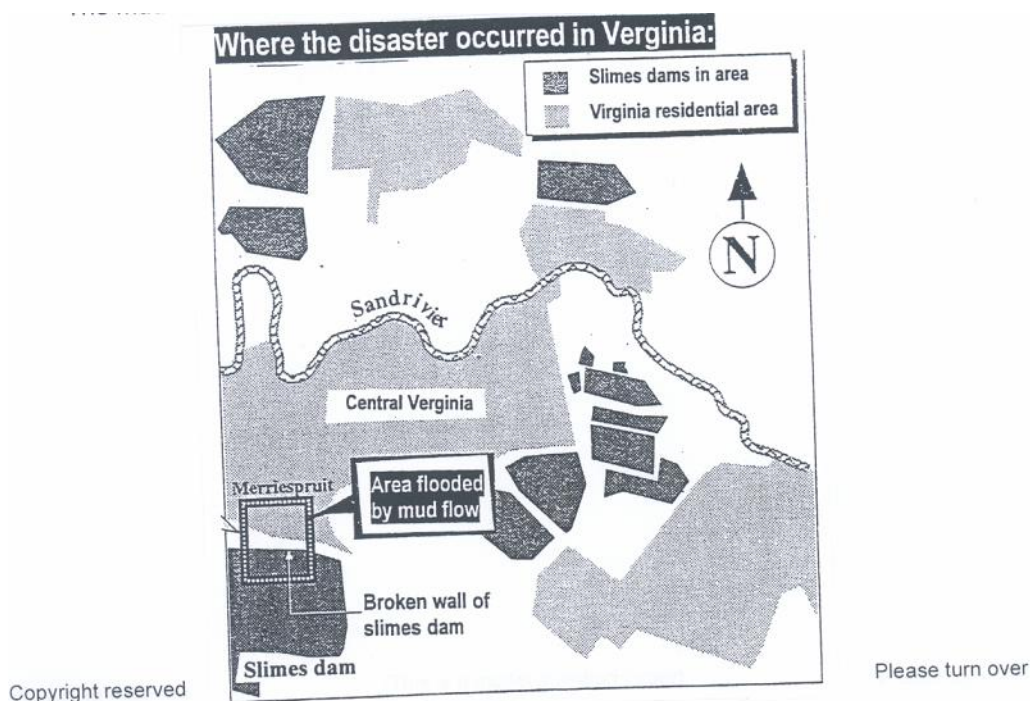
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- 3.4 Read the following extract about Virginia from a newspaper article which appeared on Thursday, 24 February 1994 and study the accompanying sketch map.

THE NIGHT THE MUD CAME

A mass of water rained down onto Virginia due to a cloud burst on Tuesday night and caused the wall of a slimes dam to break. Waves of mud as high as the roofs of the houses poured over the homes of this small mining community. The cloud burst occurred at approximately nine o'clock on Tuesday night. The pressure of the water ripped a 50 metre gap into the wall of the slimes dam.

The damage is astronomical and caused untold pain and suffering to hundreds of people. Merriespruit is the closest to the slimes dam, only about 320 metres. The mud flowed over the houses in two streams of about 425 metres wide.



- 3.4.1 Which suburb of Virginia was affected by the mud flow?

(1 x 2) (2)

- 3.4.2 Give the alphanumeric reference (on the topographic map) for this suburb.

(1 x 2) (2)

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3.4.3 Which dam X, Y or Z on the topographic map, caused the disaster?

_____ (1 x 2) (2)

3.4.4 Name TWO other examples of mass movement (mass wasting) that can take place under the influence of gravity or gravity and water.

_____ (1 x 2) (2)
[24]

TOTAL: 75