

## **GRADE 11 EXEMPLAR PAPERS**

**GEOGRAPHY: PAPER II** 

## **MARKING GUIDELINES**

Time: 3 hours 300 marks

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# QUESTION 1 Mapwork Skills

LO 1: LO 3:	AS 2, 4 AS 1	
1.1	<ul> <li>Distances between parallels become greater towards the poles.</li> <li>Northern and southern landmasses tend to be exaggerated in area.</li> <li>Lines of latitude and longitude cross each other at right angles [any 2 points]</li> </ul>	(2)
1.2	<b>Direction is accurate</b> on the map; however distance and area are not. Area and distance becomes exaggerated towards the poles, e.g. Greenland often appears as large as Africa!	(3)
1.3	A – Botswana B – Cahora Bassa Dam C – Mount Kilimanjaro D – Atlas Mountains E – Aswan Dam	(5)
1.4	(a) 33° 37′ 08″S 22° 09′ 30″ E (b) 33° 34′ 18″S 22° 13′ 14″ E	(3) (3)
1.5	Map distance = 3,3cm Actual distance of runway = 1,65km	(2)
1.6	Speed = distance/time S = 5.5km/5 X60 Speed = 66km/hr	(2)
1.7	Bearing = 82° Direction = NNE or NE (both acceptable)	(2) (1)

26 marks

(3)

1.8

40 hectares

## QUESTION 2 Interpreting the topography of the area

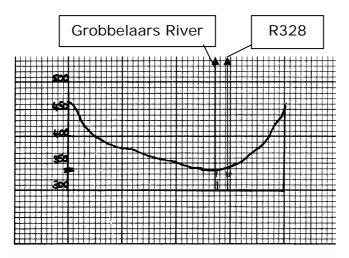
LO 1: AS 2, 4, 5

LO 3: AS 1

Cross section profile from Trig beacon 404 (C2) to Trig beacon 286 (F3)

Correct labeling of profile – 2marks

(2)



(5)

## 2.2 Vertical Exaggeration:

Vertical scale = 1: 2000 Horizontal scale = 1: 50 000

Vertical exaggeration = 25 times (3)

#### 2.3 Gradient:

Vertical difference in height = 497, 1 m - 404 m = 93,1 m Horizontal distance along footpath = 1 100 m (actual distance) Gradient of slope = 1: 12 (3)

## 2.4 Yes

Trig beacon 289 has a vertical height of 497, 1 m. It is the highest point in the area; therefore one would be able to see the peaks of spot 404 and 343.

(2)

15 marks

## QUESTION 3 Map, Orthophoto interpretation and GIS

LO1:	AS	2,	4,	5	
LO2:	AS	1,	2,	3,	4
102.	۸C	1			

LO3: AS 1,

3.1 A = Excavation (2)

B = Recreational area - tennis courts (2)

- 3.2 (a) Olifants River / Kammanassie River / Klip River [any 2] (2)
  - (b) Irrigation methods include: furrows and canals (2)
- 3.3 Possible causes of river pollution:
  - Sewage Disposal works
  - Extensive irrigation along the floodplain of the Olifants River. Should pesticides or fertilisers be utilised, these could pollute the water.
  - N12 and railway run alongside the Klip River air pollution due to combustion of fossil fuels, litter from passing traffic. (5)
- 3.4 Satellites gather data from outer space.
  - Satellite data is sent directly to the ground receiving station (if it falls within the direct path)
  - Data is processed so that images are clear and sharp.
  - Information is then dispatched to people/organisations requiring the data. (5)
- 3.5 (a) GIS refers to a combination of computer hardware systems, software programmes and geographical data working together to solve problems of a geographical nature. GIS allows the operator to analyse, integrate and interpret various forms of data, patterns and spatial arrangements. A GIS uses maps as different data layers to build up a comprehensive picture of an area.
  - (b) A variety of GIS layers could be used to analyse this Klein Karoo area in greater detail:
    - Location of farm boundaries
    - Vegetation cover to determine areas of overgrazing
    - The above two layers should reveal which farms are experiencing the worst management issues as far as over grazing of stock is concerned.
    - Soil type this is very much interlinked with vegetation in that the soil type and quality will influence the type of vegetation and the likelihood of vegetation recovery in an area.
    - Rivers and streams water supply animals often congregate in these areas – are these regions more prone to being overgrazed?

These are examples, there are many other suitable points that learners could include. NB – they should be relevant to the mapped area! Any 4 suitable points will be accepted here.

23 marks

(5)

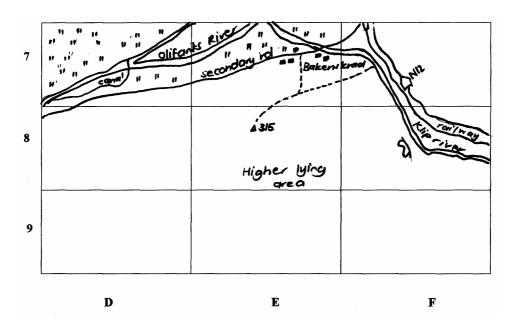
## QUESTION 4 Fieldwork and Data Analysis

LO1: AS 1, 2, 4, 5

LO2: AS 1, 3

LO3: 1

4.1



(8)

The following must appear on the sketch map:

Olifants River

Klip River

Cultivated land

N12

Railway

Secondary road

Footpath

Higher laying region

- 4.2 Does the farm have a winter or summer rainfall?
  - There is evidence of cultivated land along the floodplain of the Olifants River, what types of crops are grown here?
  - Is there stock on the farm, what sorts of stock?
  - · Are there individual grazing camps to control stock grazing?
  - What water management strategies are in place?
  - Have you considered the reintroduction of game onto your farm? [any 5 relevant questions that are inked to the sustainable use of the landscape.]

(5)

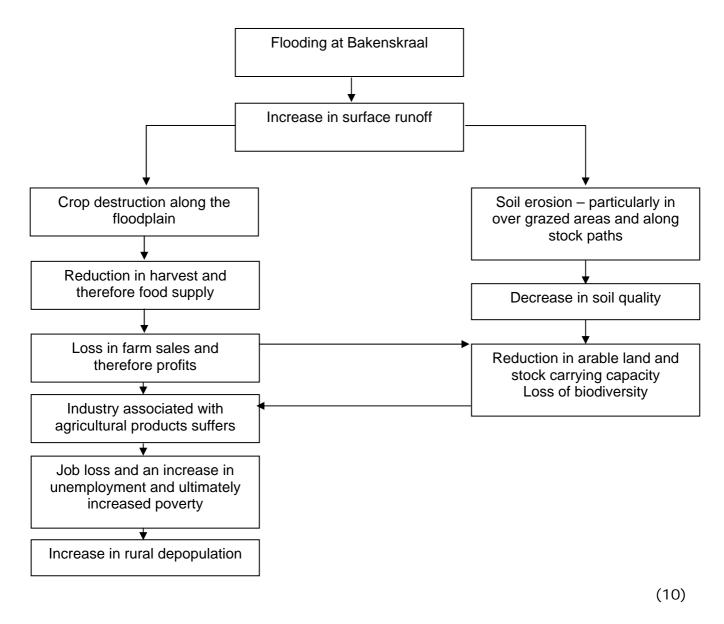
(1)

4.3

- 4.3.1 2 050 mm (2)
- 4.3.2 Due to the fact that 2007 is not yet complete, and figures would be representative of an entire year's rainfall.
- 4.3.3 2002 (350 mm), 2003 (400 mm) (2)
- 4.3.4 The farm would have run at a loss, in that during this year a below average rainfall fell. In 2000, an annual rainfall of 200 mm was recorded which is well below the average value of 331 mm for the farm. As a result additional funds would have to be spent on irrigation and animal feed.

(2)

### 4.3.5 Flooding at Bakenskraal



- 4.3.6 1. Part of the farm is located along the floodplain fertile land.
  - 2. Established irrigation systems from the Olifants River and Klip River in the form of furrows and canals.
  - 3. Good accessibility via road (N12) into Oudtshoorn and by railway.
  - 4. Close proximity to Oudtshoorn for daily needs and services.
  - 5. Cultivated land areas situated on a north-facing slope maximum insulation.
  - 6. Close proximity to the aerodrome.

36 marks

(6)

Total: 100 marks