

June 2019

Hillcrest High School

Marks: 75

9

Time: 1 hour

Examiner CR Madeley

Moderator P. Ramsern

Geography Exam

Instructions:

1. Answer all the questions in the answer booklet provided.
2. Number your answers according to the question paper.
3. Write neatly and clearly. Work efficiently. Do not spend too long on one question and pay attention to mark allocation and wording of questions.

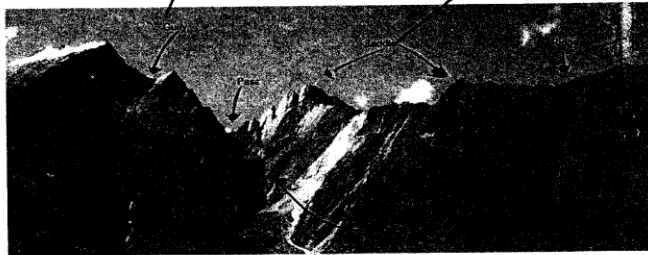
Question One Understanding landscapes and land use using a topographical map.

Refer to the extract from the Hopetown map attached to the end of this question paper. You may detach the map from the question paper. Hopetown is located on the banks of the Orange River which is the longest river in South Africa. The area around the river is arid and bare so the river plays an important part in part in the livelihood of the people.

- 1.1 The type of farming practised here is:
- A. Fruit farming
 - B. Stock farming/cattle and sheep
 - C. Crop farming
 - D. Poultry farming (1)
- 1.2 State the difference in altitude between each contour on this map. (Use the correct unit) (1)
- 1.3 State the longitude in degrees of Hopetown. (1)
- 1.4 Name the feature in **J6** that has been erected to help supply water. (1)
- 1.5 Name the river feature in grid **B10** that indicates that the river has deposited material in its course. (1)
- 1.6 Explain what causes a river to deposit material? (2)
- 1.7 Why does the *relief* in grid F1, 2 and 3 favour farming? (1)
- 1.8 The village in grids J5 and J6 supplies services to the surrounding rural community. Name two of these services. (2)

- 1.9 A tour group is hiking from the Blokhuis in grid F6 (an old Boer war guard house that used to guard the river crossing) to the top of Kanonkop. In which direction will they hike? (1)
- b. How far will they have hiked in kilometres? (1)
- c. Comment on the steepness of their hike. Justify your answer. (3)
- 1.10 a. Study the course of the Orange River from E 1 to E5. What river feature do you recognise? (1)
- b. Suggest how this feature has affected settlement in the area. (2)
- 1.11 Sand and stone was used in the construction of the railway line embankments in B6 and A6. Name the feature that was left when building was completed. (1)
- 1.12 State one negative effect of this feature on the natural environment. (1)
- [20]

Question Two 2. Landscapes and landforms 1.

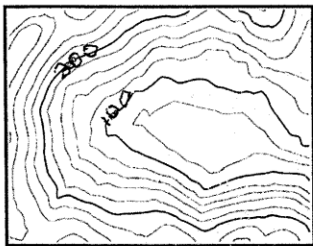


2.1 Choose a feature from those numbered 1-3 in the photograph above to match with the contour patterns numbered A- C below.

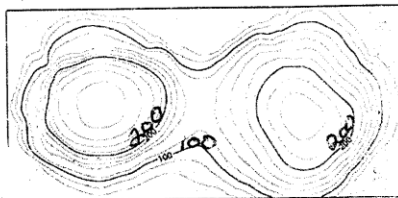
Write the name of the feature and next to it the letter of the correct contour pattern.

(3)

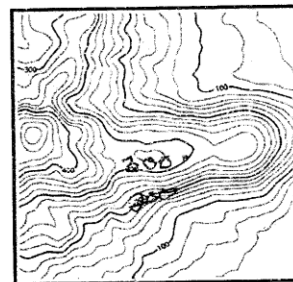
A.



B.



C.



100

2.2 Describe the significance to us of each of the following features:

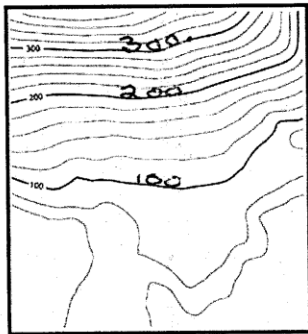
a. a pass such as the one in the photo.

b. a valley

(4)

2.3 What type of slope is represented below?

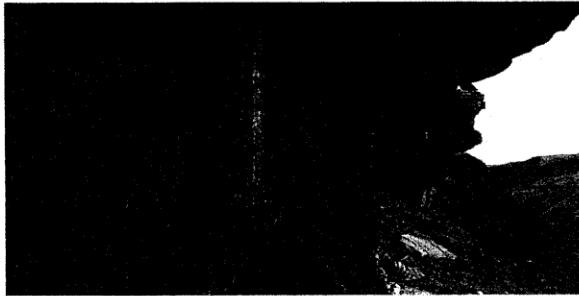
(1)



Question Three

Forces that shape the earth

The photograph below shows a typical sandstone cave in the Drakensberg. Bushman paintings can be seen on the rock walls.



Source: sa.venues.com

3.1 Explain the role that weathering has played in forming this cave. (4)

3.2 State which of the 3 *types of weathering* that you studied is likely to have occurred in each of the following cases. Then give the specific name for the process described. (Just 2 words are required in each case.)

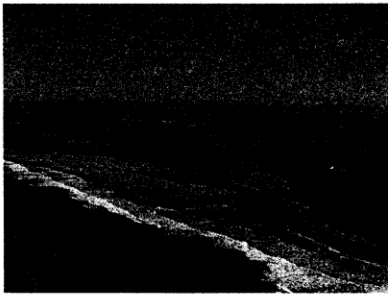
- a. minerals in the rock reacted with rain water and dissolved.
- b. Ice formed during episodes of cold and then thawed when it warmed up.
- c. Heating and cooling of the outside rock layers occurred and this led to them peeling off. (6)

3.3 Outline two positive impacts that weathering has had for the people that have used the Drakensberg over the centuries. (4)

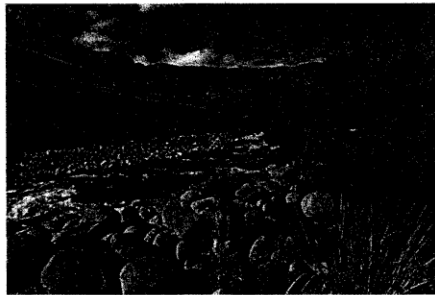
Question Four The effect of rivers on our landscapes

The two photographs below show the Tugela River at its upper course (photo A) and at its mouth. (photo B)

B.



A.



4.1 Compare the two parts of the river A and B with respect to:

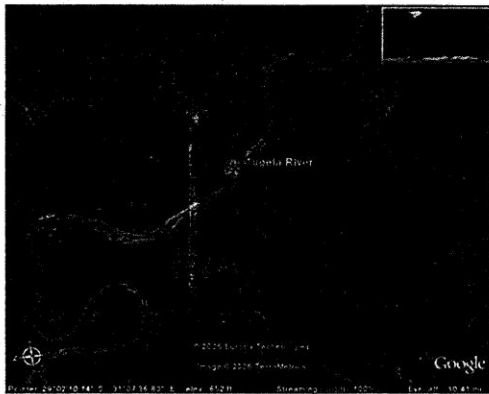
- A. gradient
- B. channel shape and size
- C. erosive ability of the river. (6)

4.2 Name and describe the *erosion process* responsible for the rounded shape of the boulders in the river in photograph B. (2)

4.3 Longshore drift has caused a bar of sand to grow across the river mouth in photograph A.

- What impact could this sand bar have on the river? (2)
- Briefly explain how longshore drift causes a sand bar to form. You may use a diagram to help your explanation. (4)

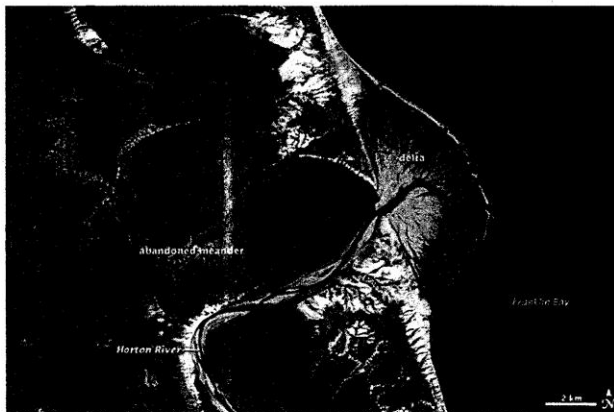
4.4 Study the Google earth image below showing the middle course of part of the same river/drainage basin.



4.4.1. Define *drainage basin*. (2)

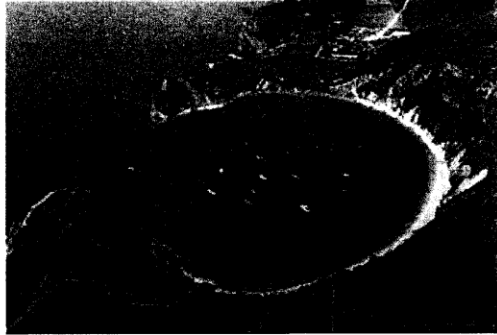
4.4.2 Redraw that part of the river from the image where an oxbow may form in the future. Indicate where and how the ox bow will form. (5)

5. The image below shows a delta that formed at a river mouth in Alaska.



- 5.1 Explain two conditions necessary in order for this delta to have formed. (4)
- 5.2 State one influence a delta has on the way people use the land. (1)

Question Six The photograph below shows a feature typical of many coastlines.



Source: coolgeography.co.uk

- 6.1 Identify the feature at **A**. (1)
- 6.2 Explain how it was formed. (3)
- 6.3 Would the waves at **B** be likely to be constructive or destructive? Explain why. (2)
- 6.4 Where would a wave cut platform be likely to form here? (1)

