

NAME DATE

INDEX NO. SIGNATURE

312/1

GEOGRAPHY

PAPER 1

JULY/AUGUST 2014

TIME: 2 $\frac{3}{4}$ HRS

MAKINDU DISTRICT INTER – SECONDARY SCHOOLS EXAMINATION

Kenya Certificate of Secondary Education

INSTRUCTIONS TO CANDIDATES

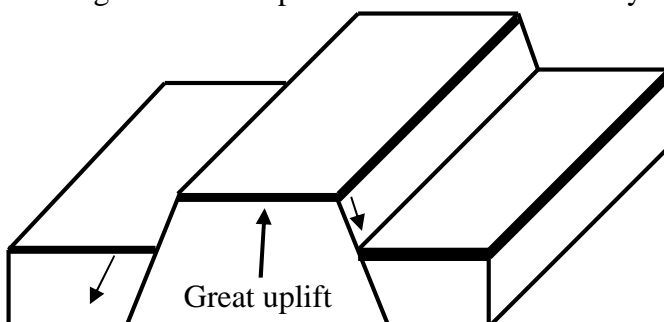
1. Write your name and index number in the spaces provided above.
2. This paper has **TWO** sections: A and B.
3. Answer **ALL** the questions in section A. In section B answer **QUESTION 6** and any other **TWO** questions from the section.
4. ALL answers **MUST** be written in the Answer Booklet provided.
5. Do not remove any pages from this booklet.
6. This paper consists of 4 printed pages. Candidates should check to ensure that all pages are printed as indicated and no questions are missing

SECTION A**Answer all the questions in this section.**

1. (a) Name the (i) planet nearest to the sun (1 mark)
(ii) Furthest from the sun (1 mark)
(b) State three effects of the rotation of the earth (3 marks)
2. (a) Name two types of compressional boundaries (2 marks)
(b) Describe how a fold mountain is formed by geosyncline (4 marks)
3. (a) Name two warm ocean currents (2 marks)
(b) State three causes of horizontal movement of ocean water (3 marks)
4. (a) what is a lapse rate? (2 marks)
(b) Name one layer of the earth's atmosphere which experiences
(i) A negative lapse rate. (1 mark)
(ii) A zero lapse rate (1 mark)
5. (a) Define solfatara (2 mark)
(b) State three ways in which calderas can form (3 mark)

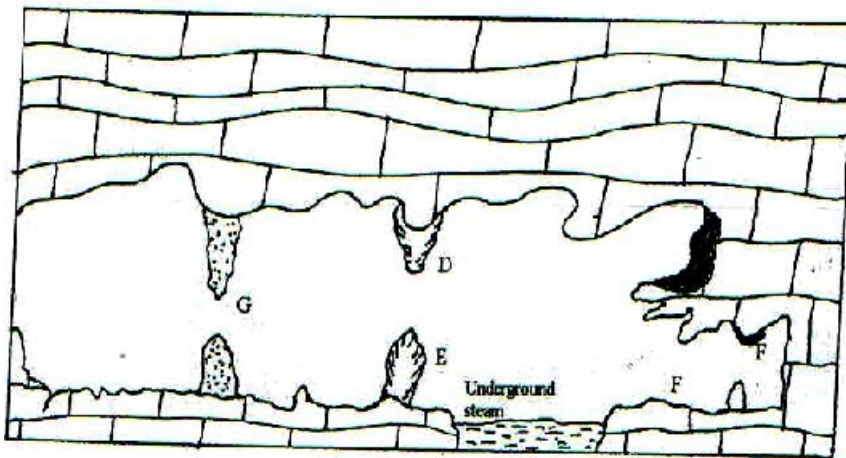
SECTION B**Answer question 6 and nay other two questions**

6. Study the map of Karatina (Sheet 121/3) provided and answer the following questions.
 - (a) (i) Name two human features found in the grid square 8257 (2 marks)
(ii) Give the longitudinal extent of the area covered by the map. (2 marks)
(iii) Calculate the area enclosed by the district boundary and the Northing 53 to the east of the area covered by the map. Give four answers in km² (2 marks)
 - (b) (i) What is the magnetic declination of the area by the time the map was drawn (2 marks)
(ii) Name two types of scales shown on this map (2 marks)
 - (c) Describe the relief of the area covered by the map. (6 marks)
 - (d) Giving evidence, explain three human activities that take place in this area. (6 mark)
 - (e) (i) Give the name of the district boundary in the area covered by the map. (1 mark)
(ii) Identify one evidence for tourism as an activity in the area. (2 marks)
7. (a) In aid of a well labeled diagrams describe the formation of the rift valley by tension. (7marks)
(b) The diagram below represents a feature formed by faulting. Use it to answer the question that follow.



- (i) Name the feature represented by the above diagram. (2marks)
- (ii) Describe the formation of the above mentioned feature. (4marks)
- (c) A part from rift valley name three other features that may form as a result of faulting. (3marks)
- (d) Students of a school in Makindu district intent to carry out a field study on internal land forming processes on the rift valley of Kenya.
- (i) Name any three features formed on a result of vulcanicity that they are likely to identify. (3marks)
- (ii) State three ways that the students would prepare for the study. (3marks)
- (iii) Give three problems that the students are likely to encounter during the study. (3marks)
8. Students from your school intend to carry out of field study on weathering on a nearby hill.
- (a) (i) State three objectives of the study. (3marks)
- (ii) Give three problems they are likely to face during the study. (3marks)
- (b) (i) List any five mechanical weathering process. (5marks)
- (ii) Identify and explain five factors influencing mass wasting. (10marks)
- (c) Give any four effects of soil creep. (4marks)

9. The diagram below represent underground features in a limestone area .Use it to answer the questions below.



- (a) (i) Name the features marked D, E, F (3marks)
- (ii) Describe how feature marked G is formed (6 marks)
- (b) (i) What is an artesian basin? (2 marks)
- (ii) Explain three factors which influence the formation of features in limestone areas (6marks)
- (c) You intend to carry out a field study in an area eroded by water
- (i) Give three reasons why you will need a working schedule (3 marks)
- (ii) Name two erosional features you are likely to identify during the field study. (2 marks)
- (iii) State three recommendations that you would make from your study to assist the local community to rehabilitate the eroded area

10.

- (a) Differentiate between weather and climate (2 marks)
- (b) State any five characteristics of the I.T.C.Z (5 marks)
- (c) (i) Describe any five characteristics of the equatorial climate (5 marks)
- (ii) Explain two reasons why the desert climate experiences extreme temperatures throughout the year.
- (d) Students from Mukamini mixed sec .school carried out a field study on a weather station near their school.
- (i) Name three instruments that they are likely to identify in a weather station. (3 marks)
- (ii) State two reasons why they need to seek permission before they set out for the study (4 marks)
- (iii) Name any two methods that they used to collect data during the study. (2 marks)