NAME ……..…….. **DATE** ……

INDEX NO. …….……...…..… **SIGNATURE** ……..……..

312/1
GEOGRAPHY
PAPER 1
JULY/AUGUST 2014
TIME: 2 ¾ HRS

MBOONI WEST SUB - COUNTY FORM FOUR JOINT EVALUATION TEST 2014

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

Geography
Paper 1

SECTION A

Answer ***all*** the questions in this section

1. (a) What is a line of longitude? (2marks)
   (b) What is the local time at Alexandria 30^0 E if the local time at Malindi is 12noon? (2marks)

2. (a) Describe how humidity is measured. (4marks)
   (b) Give two factors that influence relative humidity. (2marks)

3. (a) Give three reasons why geographers study the plate tectonics theory. (3marks)
   (b) Name two types of tectonic plate boundaries. (2marks)

4. (a) The table below shows temperature readings at a weather stations for one week.

Temp./Day	Mon	Tue	Wed	Thur	Fri	Sat	Sun
Max(^{0}c)	28	27	28	26	29	29	26
Min (^{0}c)	18	18	20	16	22	21	19

Calculate:

a. (i) The diurnal range of temperature for Thursday. (1mark)
   (ii) The mean temperature for Monday. (1mark)

b. (i) Apart from water vapour, name two other substances that are suspended in the atmosphere. (2marks)
   (ii) Give two factors that are considered when classifying clouds. (2marks
   (iii) Name two types of clouds that give rise to rainfall in the tropical regions. (2marks)

5. Name two conditions that lead to deposition of silt at the mouth of a river. (2marks)

SECTION B

Answer ***question 6*** and ***any other two*** questions from this section.

6. Study the map of KARATINA (1:50000), sheet 121/3 provided and answer the following questions

a. (i) Give the latitudinal and longitudinal extent of the area covered by the map. (2marks)
   (ii) Calculate the area (in square kilometers) enclosed by the property boundary and the district boundary to the south Eastern part of the area shown. (2marks)

b. (i) Name the vegetation type in grid square 0045. (1mark)
   (ii) Describe the drainage of the area covered by the map. Extract. (3marks)

c. (i) Using a vertical scale of 1cm to represent a 100 metres draw a cross-section from grid reference 830,500 upto 900,500 along northing 50. (4marks)
   (ii) On the cross-section; mark and label
   - River Rathithi (1mark)
   - All weather road D451. (1mark)

- Dry weather Road E1710 (1mark)

(iii) Calculate the vertical exaggeration for the cross-section. (2marks)

d. Geography students from Ragati secondary school in grid square 9249 decided to carry out a field study in the area around Karatina Township.

(i) Name two means of transport they are likely to have used to travel to Karatina Township. (2marks)

(ii) State three social functions of Karatina Township that they identified. (4marks)

(iii) Identify the adjoining sheet and number to the south east of Karatina. (2marks)

7.

a (i) Apart from the Rift valley ,name two other relief features that were formed as a result of faulting. (2marks)

(ii)With the aid of a well labeled diagram describe how a Rift valley is formed as a result of tensional forces. (8marks)

b. Explain four effects of faulting on human activities. (8marks)

c. Geography students from Ngai secondary school are planning to carry out a field study on area affected by faulting.

(i) State four reasons why it is important for the students to carry out a reconnaissance study. (4marks)

(ii) Give three disadvantages of using direct observation as a method of data collection in such an area. (3marks)

8. (a) Draw a well labeled diagram of the hydrological cyde. (5marks)

(b) Explain how a river erodes the following processes.

(i) Corrosion. (2marks)

(ii) Abrasion (2marks)

(c) Identify two methods of river transportation. (2marks)

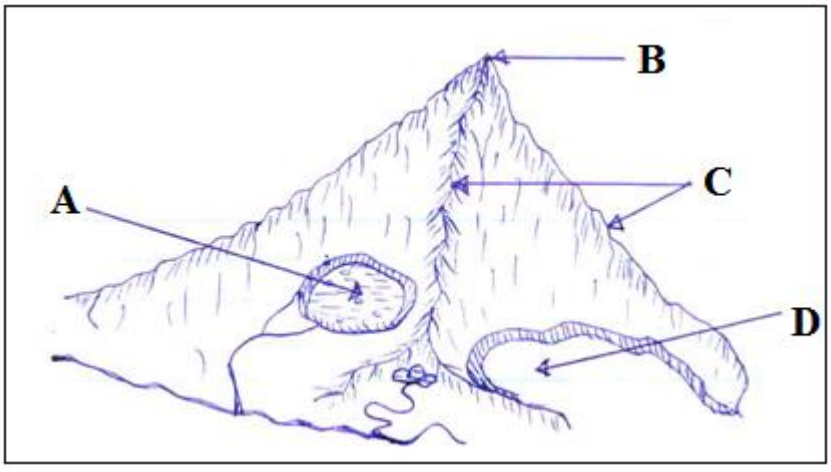
(d) Using a well-labeled diagram explain how a waterfall may form over a fault scarp. (5marks)

(e) Identify two features on the flood-plain. (2marks)

(f) Explain how a river capture may occur. (3marks)

(g) You have been asked to carry out a field study on a river near your school. Identify four types of evidence that may indicate that river capture has occurred along the river. (4marks)

9. Use the diagram below to answer the questions that follow.



a) Identify the features marked; A, B, C and D (4marks)

b) Describe how each of the features identified in (a) above are formed (16marks)

c) Suppose you were to carry out a field study in glaciated areas.

(i) Identify two types of moraine that you would study. (2marks)

(ii) State three methods that you would use to collect data. (3marks)

10.

a) (i) State three sources of underground water. (3marks)

(ii) Explain two ways through which water infiltrates into the ground. (2marks)

(iii) Using a well-labeled diagram, explain the formation of an artesian basin. (4marks)

b). With the aid of a well –labeled diagram, explain how the action of water leads to the formation of clints. (4marks)

c). You have been asked to carry out a field study on underground features in a karst region/scenery.

(i) Refine a working schedule. (1mark)

(ii) What is the importance of preparing a working schedule in field study? (3marks)

(iii)Name three underground features you are likely to study. (3marks)

ANSWERS: