**Name: ................................................................... Index No.............................................................................**

School: ................................................................. Candidate’s Signature: ........................................................

 Date: ....................................................................................

312/1

**GEOGRAPHY**

Paper 1

**Time: 2 ¾ Hours**

**MACHAKOS COUNTY KCSE TRIAL & PRACTICE EXAMINATION 2015**

***Kenya Certificate of Secondary Education (K.C.S.E)***

**GEOGRAPHY**

Paper 1

**Time: 2 ¾ Hours**

**INSTRUCTIONS TO CANDIDATES:**

* *This paper has* ***two*** *sections* ***A*** *and* ***B***
* *Answer* ***All*** *questions in Section* ***A****, In section* ***B*** *answer question 6 and any other* ***two*** *questions.*
* *All answers must be written in the answer booklet provided.*
* *This paper consists of 4 printed pages. Candidates should check to ascertain that all pages are printed as indicated and that no questions are missing.*

***A special Performance Improvement Project***

***By His Excellency Dr. Alfred Mutua***

***Sponsored by the County Government of Machakos***

**SECTION A**

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

1. a) What is the solar system? (1 marks)

 b) State three planets that have satellites. (3 marks)

2. a) Differentiate between meteors and meteorites. (2 marks)

 b) State three differences between latitudes and longitudes. (3 marks)

3. a) State three causes of the earth movements (3 marks)

 b) List two features resulting from horizontal earth movements. (2 marks)

4. Carefully study the diagram below and use it to answer question below.

A

B

C

Glacier

Melt water

 a) Identify the parts A, B, C. (3 marks)

 b) State two factors that influence the rate of ice movement. (2 marks)

 c) State two conditions that lead to glacial deposition. (2 marks)

5. a) Name two plains found in Kenya. (2 marks)

 b) State two ways in which plains are formed (2 marks)

 **SECTION B**

 **Answer question 6 and any other two questions in this section**

6. Study the map of Karatina sheet 121 / 3, scale 1: 50, 000 provided and answer the following questions.

a) i) What was magnetic declination of the map as at January 1992? (1 mark)

 ii) Give the latitudinal and longitudinal extent of the area covered by the map. (2 marks)

b) i) Apart from contours, name one other method used to show relief in the area covered by the map.

 (2 marks)

 ii) Calculate the area of Mt. Kenya forest reserve within Kirinyaga District shown on the map. Give

 your answer in square kilometers. (2 marks)

c) i) Apart from houses , name two human made features in grid square 8755. (2 marks)

 ii) Assume that four people live in each house in grid square 8755. Calculate population density.

 (2 marks)

d) Describe the flow of River Sagana. (3 marks)

e) i) Using evidence from the map identify two farming activities taking place in the area covered

 by the map. (2 marks)

 ii) Explain three factors which have influenced any of the farming activities qualified in (e) (i) above. (9 marks)

7. (a) (i) State three causes of faulting? (3 marks)

 (ii) Differentiate between a normal and reverse fault (2 marks)

 b) With the aid of well labeled diagrams describe how a rift valley can be formed by Compressional

 forces. (7 marks)

 c) Explain three effects of faulting (6 marks)

 d) You carried out a field study on faulting in the Rift Valley of Kenya. (2 marks)

 i) State two objectives for the study you carried out. (2 marks)

 ii) Give three follow – up activities you may have engaged in. (3 marks)

8. (a) What is a river catchment ? (2 marks)

 (b) State three conditions which lead to the rejuvenation of river. (3 marks)

 (c) Explain how a river capture occurs. (8 marks)

 (d) i) Describe four processes by which a river transports its load. (8 marks)

 ii) List four characteristics of a flood plain. (4 marks)

9. (a) Differentiate weather and weathering. (2 marks)

 (b) How can rocks be broken up by physical weathering (6 marks)

 (c) List five processes through which chemical weathering takes place (5 marks)

 (d) i) What is mass wasting. (2 marks)

 ii) State four factors that influence mass wasting (4 marks)

 iii) Explain the positive effects of mass wasting to human. (6 marks)

10 a) i) Apart from rain and ice, name two other sources of underground water. (2 marks)

 ii) Explain how the following factors influence the existence of ground water.

* Nature of the rocks (2 marks )
* Vegetation cover (2 marks )

 iii) Distinguish between phreatic and vadose zone (2 marks)

 b) The diagram below represents features in a limestone area.

Underground

stream

X

Z

Y

 i) Name the features marked X, Y and Z. (3 marks)

 ii) Describe how limestone pillar was formed (5 marks)

 c) You are supposed to carry out a field study of an area eroded by underground water.

 i) Name two surface features you are likely to identify during the field study (2 marks)

 ii) State four reasons why you would prepare a work schedule (4 marks)

 iii) Give three follow –up activities you would engage in: (3 marks)