Name…… **Index No……/…….**

School…… **Date ……..…**

Candidate's Signature……

312/1

GEOGRAPHY

Paper1

JULY / AUGUST 2012

Time: 2Hours 45 Minutes

BUTULA DISTRICT FORM FOUR JOINT MID YEAR EXAMINATIONS - 2012

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

312/1

GEOGRAPHY

Paper1

JULY / AUGUST 2012

Time: 2Hours 45 Minutes

INSTRUCTIONS TO CANDIDATES

- This paper has two sections A and B
- Answer all the 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 the question paper to ascertain that all pages are Printed as indicated and that no question is missing

1. (a) State how the following forces influence the shape of the earth.
   (i) Force of gravity
   (ii) Centripetal force
   (iii) Centrifugal force
   (b) State three significances of weather forecasting
2. (a) What is an earth quake
   (b) List three natural causes of earth quakes
3. (a) State three characteristics of the desert climate. (3mks)
   (b) Name two areas in Kenya that experience the tropical continental climate (2mks)
4. (a) Name three types of drainage patterns. (3mks)
   (b) Explain why warm air cools as it rises (2mks)
5. (a) Name two processes of river erosion (2mks)
   (b) Define river rejuvenation (1mk)
   (c) State two conditions necessary for river capture (2mks)
6. Use the map of Nkubu sheet 122/1 to answer the following questions.
   (a) Measure the all weather roads from Meru
      (i) To the junction at Nkubu. (2mks)
      Identify the relief feature found in
      (ii) Grid square 3889 . (1mk)
   (b) Give the compass bearing of trigonometrical station 122 ST 8 In grid square 4193 from the air photo principal point in grid square 4698 (3mks)
   (c) Draw a cross section from 4792 to 5390
      (i) On it indicate
         - I A river valley II All weather road
         - Use a vertical scale of 1cm to represent 50m. (10mks)
      (ii) Calculate the vertical exaggeration and gradient of the cross section (4mks)
   (d) Describe the drainage of the area covered by the map (4mks)
   (e) Give the latitudinal and longitudinal extent of the area covered by the map. (2mks)
7. (a) (i) What is a desert (1mk)
      (ii) Explain two process of wind erosion in deserts (4mks)
   (b) With the aid of well labeled diagrams, describe how the following features are formed
      (i) Rock Pedestals (6mks)
      (ii) Yardangs (6mks)
   (c) Name three features results from deposition in arid areas (3mks)
   (d) Explain two negative effects of desert land forms (4mks)

8. (a) (i) Differentiate between Aridity and desertification (2mks)

(ii) Explain how the following factors influence Aridity.

- Winds and ocean currents (2mks)
- Continentality (2mks)
- Pressure systems (2mks)

(iii) State 4 possible solutions to aridity and desertification. (4mks)

(b) (i) Define climate change (2mks)

(ii) Explain three external causes of climate change (6mks)

(iii) Name three Green houses gases (3mks)

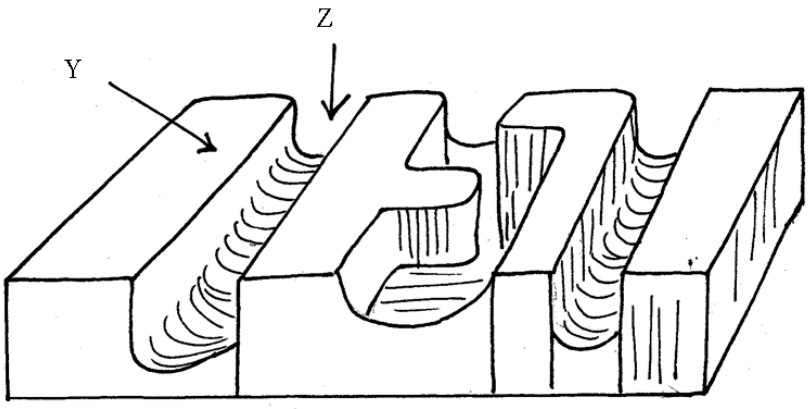
(iv) Give two evidence to support the existence of climate Change (2mks)

9. (a) (i) Give two sources of underground water (2mks)

(ii) State three factors that influence occurrence of underground water. (3mks)

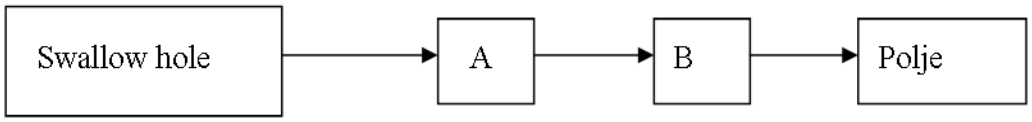
(b) (i) Using diagrams describe the conditions that favour location of an artesian well (5mks)

(ii) Study the diagram below and answer the questions that follow .The diagram pertains to action of water in limestone areas.



Name the feature labeled Y and Z (2mks)

(c) (i) Complete the flow chart below concerning action of water in limestone areas.



Name the features represented by A and B (2mks)

(ii) Differentiate between effluent and influent rivers (2mks)

(d) Describe the formation of stalagmites and stalactites (6mks)

(e) Students of Elimu Secondary School made a field study of underground features in a karst Scenery

(i) Suggest a little for their study. (1mk)

(ii) Name two features they may have come across , apart from stalagmites and stalactites (3mks)

10. (a) (i) Differentiate between a river system and river drainage basin (2mks)

(ii) Describe three process of river erosion (6mks)

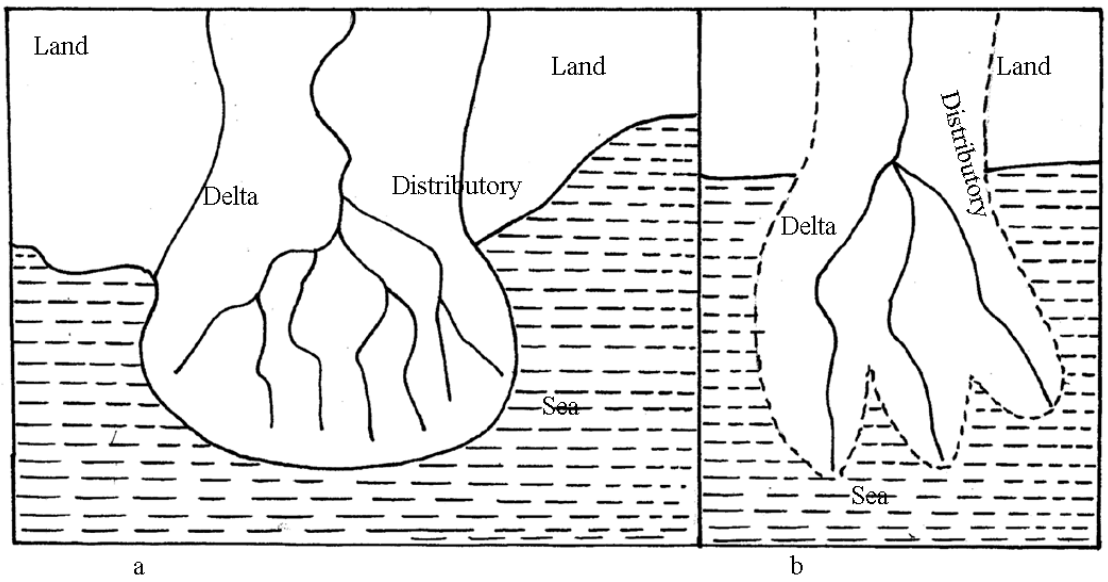
(b) (i) Describe the formation of an ox-bow lake (5mks)

(ii) Describe the process of river capture (4mks)

(c) (i) What is river rejuvenation? (2mks)

(ii) Name two features which result from river rejuvenation (2mks)

(iii) Study the diagrams below and answer the questions that follow:



Name the deltas labeled (a) and (b) (2mks)

(iv) State two significances of rivers (2mks)

END