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

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

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

312/1

**GEOGRAPHY**

Paper 1

**Time: 2 ¾ Hours**

**NZAUI SUB COUNTY FORM 4 ENTRANCE EXAM 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.*

**SECTION A**

1. a) Give two factors that influence Temperature (2marks)

 b) State three reasons why weather forecasting is important to farmers (3marks)

2. a) Name two scales used to measure the intensity of earthquake (2marks)

 b) Give three natural causes of earthquake (3marks)

3. a) Give two processes of slow mass wasting (2marks)

 b) State three physical conditions that may influence landslides (3marks)

4. a) State two conditions necessary for the development of Karst scenery (3marks)

 b) Give two reasons why there are few settlements in Karst landscapes (2marks)

5. a) Define the term mineral (1mark)

 b) Distinguish between porous and pervious rocks (2marks)

 c) List two factors that influence the development of a soil profile (2marks)

 **SECTION B**

 **MAPWORK: COMPULSORY**

6. You are provided with Nkubu topographical map sheet No 122/1/ to answer the following questions

a. i) Measure the all weather road from Meru to the Junction at Nkubu (2marks)

 ii) Identify the relief features found in arid square 3889 (1mark)

b. Give the compass bearing of trigonometric station 122ST8 in grid square 4193 from the air photo principal point in grid square 4698 (2marks)

c. i) Using a vertical scale of 1 cm to represent 50m.

 Draw a cross section from 4792 to 5390 (4 marks)

 On it indicate

 a) A river valley

 b) All weather road (2marks)

 ii) Calculate the vertical exaggeration (2marks)

 iii) Gradient (2marks)

d. Give the latitudinal and longitudinal extent of the area covered by the map (4marks)

e. Describe the drainage of the area covered by the map. (6marks)

7. i) Distinguish between Aridity and desertification (2marks)

 ii) Identify two types of desert surfaces (2marks)

 iii) State why wind action is most active in hot deserts than cold deserts (4marks)

b. Explain the following process of wind erosion

 i) Abrasion (2marks)

 ii) Deflation (2marks)

 iii) Attrition (2marks)

c. i) Give two factors that influence the transportation of material by wind in deserts (2marks)

 ii) The diagram below shows some features of wind erosion.

 Identify K, L and M (3 marks)

Gentle windward slope

Steep leeward

Slope

Side Wind

K

L

M

d. Your class is planning to carry out a field study of a desert environment

 i) State three ways of preparing for the field study (3marks)

 ii) Give three features that would be observed in the arid area (3marks)

8. i) Name two types of faults (2marks)

 ii) Name 3 features resulting from faulting (3marks)

b. i) List three horst mountains found in East Africa (3marks)

 ii) With aid of a well labeled diagram, describe how a horst mountain is formed (6marks)

c i) State three causes of vulcanicity (3marks)

 ii) Give two characteristics of a shield volcano (2marks)

d. State three economic importance of faulting to man (6 marks)

9. a.

 i) Define natural vegetation (1mark)

 ii) State four characteristics of natural vegetation found in tropical rain forests (4marks)

 b. Explain 4 ways in which vegetation found in arid areas adapts to environmental conditions of the

 region (8marks)

 c. Write the names of the following grasslands found in the following areas (3 marks)

* East Africa
* Canada
* Argentina

d. i) Give two reasons why Tundra region has scanty vegetation (2marks)

 ii) State two topographical factors that influence vegetation distribution (2marks)

 e. State five economic importance of vegetation (5marks)

10 a)

 i) Define the term sea (2marks)

 ii) Give two aspects of an ocean (2marks)

b) Explain how the following factors influence the salinity of ocean water

 i) Latitude (2marks)

 ii) Ocean depth (2marks)

 iii) Position of the inland water (2marks)

c. i) List four types of tides (4marks)

 ii) Using a well labeled diagram, describe the formation of a Tombolo (7marks)

d) Students of a school carried out a field study along the Kenyan coast

 i) Name two features they might have studied which showed emerged coast (2marks)

 ii) State 2 economic benefits of oceans to man (2marks)