**312/1**

**GEOGRAPHY**

**PAPER 1**

**TIME: 23/4 HOURS**

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

**Geography**

**Paper 1**

**Time: 23/4 hours**

**INSTRUCTIONS TO CANDIDATES**

* *This paper consists of* ***two*** *sections; section* ***A*** *and section* ***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 indicated and that no question are missing***

**SECTION A (25 MARKS)**

*Answer* ***ALL*** *the questions in this section.*

1. (a) Differentiate between equinox and solstice. (2marks)

(b) Name **three** types of tectonic plates boundaries (3marks)

1. (a)Differentiate between anabatic winds and katabatic winds (2marks)

(b) State **three** factors that hinder weather forecasting (3marks)

1. (a)State **three** occurrence of minerals (3marks)

(b) State **two** layers of atmosphere which experience Negative Lapse Rate. (2marks)

1. (a)What is a longitude? (2marks)

(b) What is the time in Hola 40oE when the time in Accra 0o Longitude is 3p.m? (3marks)

1. (a)State **two** factors that influence rate of erosion by a river in its upper course (2marks)

(b) State **three** ways in which waves in Indian Ocean erodes its coast. (3marks)

**SECTION B**

*Answer question* ***6 (compulsory)****& any other* ***TWO*** *questions from this section.*

Use map of Migwani 151/1 provided to answer question 6

1. (a)Name **two** type of natural vegetation in North of Northing’s 83 (2marks)

(b)Citing evidence from the map explains three factors that favoured the establishment of Mutitu

(Ndooa) Town in the area (6marks)

(c )Using a scale of 1cm represent 100metres. Draw across-section from point x(080660 to

Y(130660) (4marks)

1. On the cross-section mark and label the following.

* Road (1mark)
* Water pipe line (1mark)
* Rivers on the East of Easting 10 (1mark)

1. Calculate vertical exaggeration of cross-section. ( 2marks)

(d)Describe the settlement of area covered by map on East of Eastings 07 (3marks)

(e)Mention Latitude and Longitude of point B at gride reference 988620 (2marks)

(f) Citing evidence from the map, state three economic activities carried out in area carried by

the map (3marks)

7. The diagram below represents a well developed soil profile. Use it to a answer question

**Vegetation**

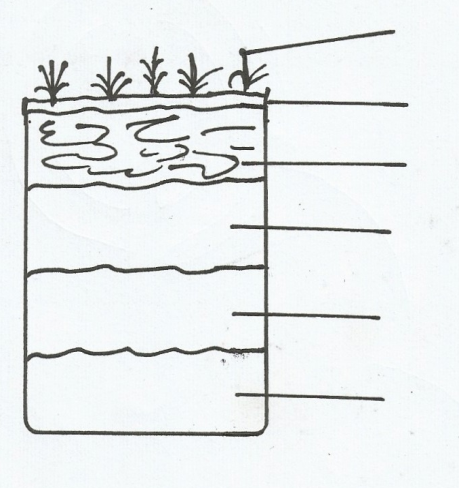
**Humus**

**Horizon A**

**Horizon B**

**Horizon C**

**Horizon D**



1. (i) Describe the characteristics of Horizon B ( 3marks)

(ii)A part from humus, name three other components of soil. (3marks)

(iii) State **three** ways in which humus contributes to the quality of soil. (3marks)

(b) (i)Differentiate between soil structure and soil texture. (2marks)

(ii) Explain how the following factors influence soil formation:

* Topography (6marks)
* Time (2marks)

(c) Explain how the following farming practices may lead to loss of soil fertility.

(i) Overgrazing (2marks)

(ii) Frequent ploughing (2marks)

(iii) Continuous irrigation (2marks)

8. (a) Describe plucking as a process in glacial erosion (4marks)

(b) Explain **three** conditions that lead to glacial deposition. (6marks)

(c)(i) Name **three** main erosional features in glaciated highlands (3marks)

(ii) Describe how terminal moraine is formed. (4marks)

(d) Explain **four** positive effects of glaciations in low land areas. (8marks)

9. (a)(i) Define the term Aridity (2marks)

(ii) Name **three** types of deserts in term of appearance (3marks)

(b) List **two** factors that contribute to the development of deserts. (2marks)

(c)Explain **three** factors influencing wind transportation (3marks)

(d) Describe how the following desert features are formed.

(i) Rock pedestal (3marks)

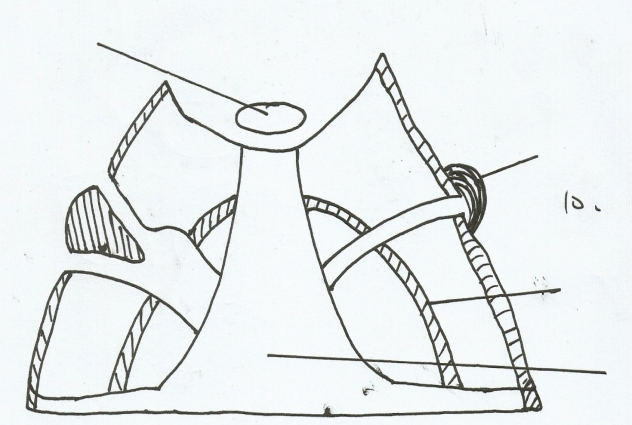
(ii) Zeugen (3marks)

(e) State any **six** significance of desert feature to human activities. (6marks)

10.(a)(i) Name **two** major earthquake zone s of the world. (2marks)

(ii) Differentiate between an intrusive volcanic feature and extrusive volcanic feature. (2marks)

1. Use the diagram below to answer the question that follows:



**Crater**

**B**

**C**

**Vent**

1. Identify the type of volcano represented above (1mark)
2. Name the parts marked B,C (2marks)
3. Describe how the above volcanic feature is formed. (4marks)

(c) List and explain the three life cycles of a volcano. (6marks)

(d) State **four** importance of volcanicity to human environment. (4marks)

(e) Students from your school carried out a field study on volcanicity within the district.

(i) State **two** objectives of their study. (2marks)

(ii) What problems did they encounter during the field study . (2marks)