312/1
GEOGRAPHY
FORM FOUR
1ST TERM 2016
2½ HRS.

Kenya Certificate of Secondary Education
GEOGRAPHY PP1
FORM FOUR 1ST TERM EXAMINATION 2016

Instructions

- ***The paper has two section A and B***
- ***Answer all the questions in section A . In section B answer question 6 and any other two question***
- **All answer 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
ANSWER ALL THE QUESTIONS IN THIS SECTION

1. (a) What is Physical Environment? (2marks)

(b) Identify three area of study under Physical geography. (3marks)

2. (a) Differentiate between extensional boundary and compressional boundary. (2marks)

(b) Briefly describe the continental drifting theory. (3marks)

3. (a) What is Natural vegetation? (2marks)

2x1=2

(b) State three characteristics of Mediterranean type of vegetation. (3marks)

4. (a) What is Seismic zone? (3marks)

(b) State two ways in which people have responded to the occurrence of Earthquakes. 2marks

5. The table below shows rainfall and temperature figures for a given station. Study it and answer question (a)

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
RAINFALL (mm)	80	120	340	150	130	90	100	120	320	120	100	80
TEMP ^{0}C	28	29	32	31	28	28	29	30	31	30	29	28

a)(i) Calculate the annual temperature range for the station. (1mark)

(ii) Describe the rainfall pattern for the station. (2marks)

b) Give two reasons why convectional rainfall is common in Western Kenya region. (2marks)

SECTION B
ANSWER QUESTION 6 AND ANY OTHER TWO QUESTIONS FROM THIS SECTION.

6 (a) (i) What kind of map is Busia map sheet. (1mark)

1 x 1 = 1mark

(ii) Give the two types of scales shown on the map. (2marks)

(iii) Calculate the bearing of the trigonometrical station found at grid square 3546 from the Air photo principal point found at grid square 3148. (2marks)

(iv) What was the magnetic declination of the map by January 1965. (2marks)

(b) (i) Calculate the area of the place enclosed between all weather Road loose surface C526 in the North and Provincial boundary in the South. (2marks)

(ii) Measure the distance of All Weather Road loose surface B8/3 from the junction at grid square 3333 upto the end southwards. Give your answer in Kilometers and Metres. (2marks)

c)(i) Use a vertical scale of 1cm rep 10m to draw a cross section along Northing 40 from East 30 to 38. (3marks)

(ii) On the cross section mark and name the following features. (3marks)

- Road
- River

- Swamp

(iii) Calculate the gradient of the cross-section. (2marks)

d) Describe the relief of the area covered by the map. (5marks)

7 (a) Give three examples of chemically formed sedimentary rocks. 3x1=3 (3marks)

(b)(i) State three conditions necessary for the growth of coral. (3marks)

(ii) Describe how coral rocks are formed. (4marks)

(c) Explain four ways in which rocks contribute to the economy of Kenya. (8marks)

(d) Some Students are planning to carry out a field study on rocks weathering around their School.

(i) List three Secondary sources of information they are likely to use as they prepare for the field study. (3marks)

(ii) Apart from using Secondary sources, state four other ways in which the Students would prepare themselves for the field study. (4marks)

8 (a)(i) State three factors that determine the size of a lake in an area. (3marks)

(ii) Give two reasons why the Rift Valley lakes are Saline. (2marks)

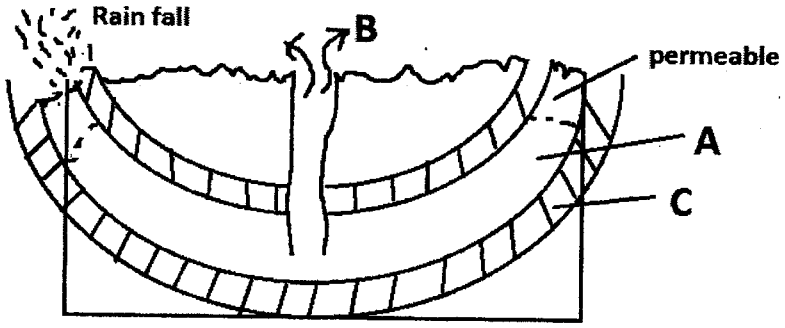
(b)(i) Explain how the following lakes are formed sitting an example of each:
Lava Dammed Lakes (3marks)

ii) Ox bow lake (4marks)

(ii) State three negative impact of human activities on Lakes. (3marks)

(c)(i) Differentiate between Porous and pervious rocks in relation to underground water. (2marks)

(ii) Name the parts labeled A, B and C in the diagram above. (3marks)



(iii) State two conditions that are necessary for the formation of the Artesian basins. (2marks)

d) State the significance of underground water to human beings. (3marks)

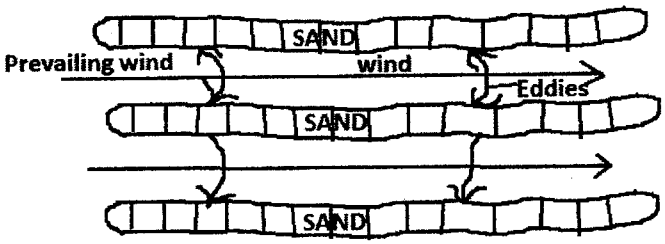
9 (a) (i) Differentiate between desert and desertification. (2marks)

(ii) Explain how wind erosion occurs by the following processes: (4marks

(b) (i) With the aid of a diagram, explain how Yardangs are formed. (4marks)

(ii) Give three ways by which wind transport its load in arid areas. (3marks)

(c) Use the diagram to answer the question that follow



i) Name the features represented by the diagram. (1mark)

(ii) Explain how the features in C (i) are formed. (3marks)

(d) (i) State four factors that influence formation at features by water action in deserts. (2marks)

(ii) State three effects of desert landform on human activities. (3marks)

(iii) State three factors that influence wind erosion. (3marks)

10(a) (i) Differentiate between Soil catena and Soil profile. (2marks)

(ii) Draw a well labeled diagram showing a mature Soil profile. (3marks)

(b) Explain how the following factors influence of Soil formation
(i) Parent rock (4marks)

(ii) Topography (3marks)

(c)(i) State four soil structures. (4marks)

(ii) Give two significance of Soil humus. (2marks)

(iii) List four characteristics of desert soils. (4marks)