

312/1

GEOGRAPHY

Paper 1

July/August 2014

Time 2 hours 45 minutes

WESTLANDS FORM FOUR JOINT EXAMINATION
Kenya Certificate of Secondary Education

GEOGRAPHY

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INSTRUCTIONS TO CANDIDATES

- This paper consists of two sections A and B.
- Answer all questions in section A
- In section B answer question 6 and any other two questions.
- Answer all questions in the answer booklet provided.

This paper consists of 4 printed pages

Candidates should check the question paper to ensure that all the

SECTION A

Answer ALL questions in this section

1. a) Name two forces that give the earth its Geoid, shape (2 marks)
b) State three effects of the revolution of the earth. (3 marks)
2. a) What is folding (2 marks)
b) Differentiate between a simple symmetrical fold and asymmetrical fold. (2 marks)
3. a) Identify three external land forming processes which lead to formation of lakes. (3 marks)
b) State two ways in which lakes influence the natural environment (2 marks)
4. a) State two causes of vertical movement of sea water. (2 marks)
b) State three characteristics of ria coast. (3 marks)
5. a) State three factors that influence the rate of glacial erosion. (3 marks)
b) Give three main processes through which ice erosion occurs (3 marks)

SECTION B:

Answer questions 6 and any other two.

6. Study the map of Karatina (1 : 50,000) provided and answer the following questions.
 - a) i) What is the longitudinal extent of the area covered by the map (2 marks)
ii) Give two methods used to represent relief on the map (2 marks)
iii) Calculate the area of Mt. Kenya forest in Kirinyaga district (2 marks)
 - b) State three problems that may be encountered during the construction of the railway. (3 marks)
 - c) Enlarge by 2 the area East of Easting 01 and South of Northing 49. on it mark and show the following: (4 marks)
air photo principal point (1 mark)
all weather road loose surface. (1 mark)
Kagumo pastoral centre. (1 mark)
 - d) Describe the drainage of the area covered by the map. (5 marks)
 - e) Citing evidence from the map, explain two physical factors that influenced the location of Karatina town. (4 marks)
7. a) State two differences between plutonic and volcanic rocks. (4 marks)
b) i) Explain how mechanically derived sedimentary rocks are formed (4 marks)
ii) Give three characteristics of igneous rocks. (3 marks)
c) i) Fill in the table below. (4 marks)

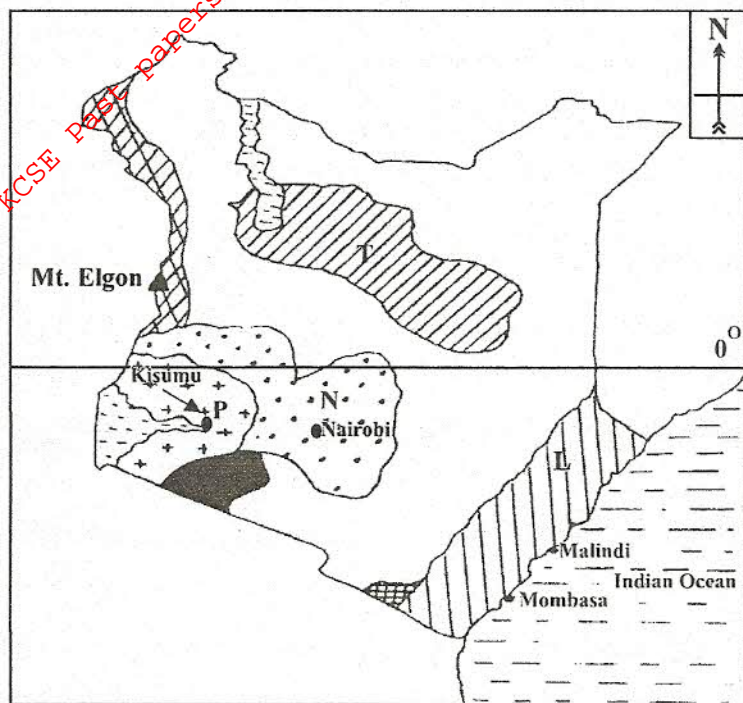
Original rocks	Metamorphic rocks
W	Slate
Granite	X
Coal	Y

d) Students of Magina Girls conducted a field study in Karst landscape.

i) Give two reasons why it was necessary for them to carry out reconnaissance. (2 marks)

ii) Identify three economic uses of Karst landscape they observed. (3 marks)

10. Use the map below to answer question (a) and (b)



a) Name the types of climate found in the shaded areas marked L, T and P. (3 marks)

b) Describe **Five** climatic conditions experienced in the shaded area marked N. (5 marks)

c) i) What is climate change? (2 marks)

ii) Explain three human causes of climate change. (6 marks)

d) You intend to carry out a field study on weather around your school.

i) Explain how you are likely to use the following instruments to measure rainfall and temperature. (3 marks)
- Rain gauge

- Maximum thermometer (3 marks)

ii) State three methods you would use to collect data on humidity. (3 marks)

ii) State four uses of rocks.

(4 marks)

d) You are planning to carry out a field study on rocks within your school.

i) State why you would need the following .

- Lenses
- Paper bags
- Geological hammer.

(1 mark)

(1 mark)

(1 mark)

ii) Give three problems you would encounter during the field study. (3 marks)

8.a)i) Name the two major types of earth movements that occur within the earth's crust.

(2 marks)

ii) Describe the origin of the continents according to the continental drift theory

(5 marks)

b) i) What is faulting

(2 marks)

ii) State two differences between normal fault and reverse fault.

(2 marks)

c) i) Apart from Rift valley, name three other relief features that are formed as a result of faulting.

(3 marks)

ii) With the aid of a well labelled diagrams describe how a rift valley is formed by compressional forces .

(7 marks)

d) State four ways in which faulting influences drainage.

(4 marks)

9.a)i) Identify two sources of underground water

(2 marks)

ii) State three factors that influence the occurrence of underground water.

(3 marks)

b) i) What is a karst scenery?

(2 marks)

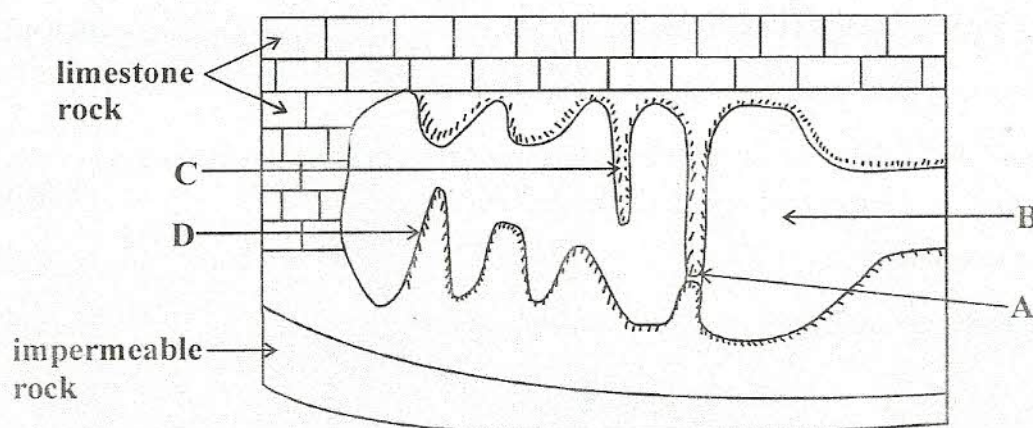
ii) State three conditions necessary for the development of karst scenery.

(3 marks)

c) i) Name three features found on the surface of limestone areas.

(3 marks)

The diagram below shows some features formed in Karst regions. Use it to answer the following questions.



ii) Name the parts marked A, B and C

(3 marks)

iii) Describe how feature D is formed

(4 marks)