

312/1
GEOGRAPHY
PAPER 1
JULY/AUGUST - 2014

TIME: 2 ¾ HOURS

MERU COUNTY JOINT EVALUATION EXAM - 2014
Kenya Certificate of Secondary Examination K.C.S.E

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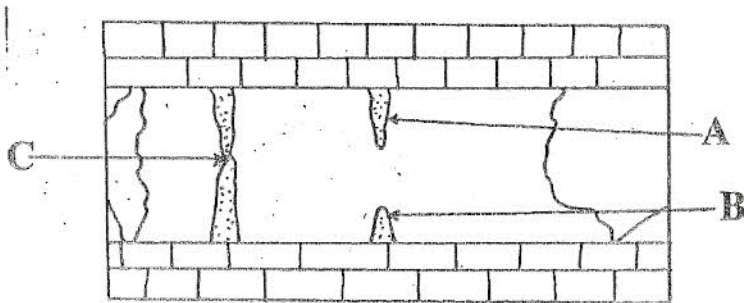
INSTRUCTIONS TO CANDIDATES

- a) This paper has two sections: A and B
- b) Answer *all* questions in section A. In section B answer question 6 and any other two questions.
All answer must be written in the answer booklet provided.
- c) Candidates should answer the question in English.

*This paper consists of 4 printed pages.
Candidates must check to ascertain that all pages are printed as indicated
and that no question(s) is/are missing.*

SECTION A (Answer all questions)

1. Using a well labeled diagram describe the centrality of Geography as a subject. (4mks)
2. (a) List two broad classification of igneous rocks. (2mks)
- (b) Classify the original rocks below into resultant metamorphic rocks. (4mks)
- Granite
- Sandstone
- Clay
- Limestone
3. (a) Define Isostasy? (2mks)
- (b) Apart from Isostatic Adjustment list three other causes of Earth movements. (3mks)
4. (a) Give two reasons why Lake Naivasha is a fresh water lake. (2mks)
- (b) State three characteristics of Rift Valley lakes (3mks)
5. (a) Define the term "Karst Scenery". (2mks)
- (b) Study the diagram of Karst landscape below and use it to answer the question(s) that follow:-



Name the features marked A, B and C. (3mks)

SECTION B

Answer question 6 and any other two questions from this section

6. Study the map of Karatina (1:50,000) sheet 121/3 provided and answer the following questions.
- (a) (i) What is the Latitudinal extent of the area covered by the map extract. (2mks)
- (ii) Calculate the area of the part of the forest in Kirinyaga District. Give your answer in km². (2mks)
- (iii) Measure the distance of the railway line from Grid reference 862523 to the market at Grid reference 915471. Give your answer in Kilometres and Metres. (2mks)
- (b) (i) Describe the relief of the area covered by the map. (4mks)
- (ii) Identify two sources of water in the area covered by the map. (2mks)

- (c) Draw a cross-section from Grid Reference 800550 to Grid Ref. 870550 (use a scale of 1cm to represent 50 metres) (4mks)

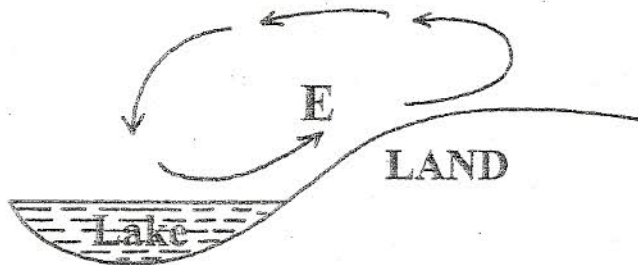
On it mark and name:

- River Sagana (1mk)
- Railway line (1mk)
- All weather Road D 451 (1mk)

- (d) Explain three factors influencing settlement in the area. (6mks)

7. (a) (i) Distinguish between weather and climate. (2mks)
(ii) Account for the characteristics of the Stevenson's screen. (6mks)

- (b) The diagram below represents the flow of air currents. Use it to answer the questions below.

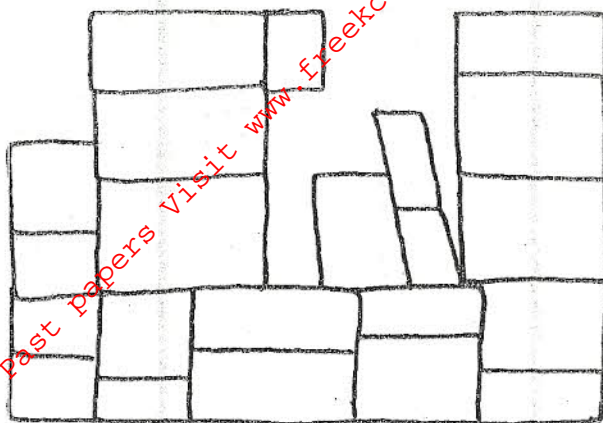


- (i) Name the air current marked E. (1mk)
(ii) Describe the occurrence of the Breeze marked E. (5mks)
- (c) (i) Apart from radiation, list two other ways in which the atmosphere is heated. (2mks)
(ii) Describe how the atmosphere is heated through radiation process. (4mks)
- (d) (i) What is meant by inter-Tropical Convergence zone (ITCZ)? (2mks)
(ii) State three characteristics of convectional rainfall. (3mks)
8. (a) (i) What is faulting? (2mks)
(ii) Outline three types of faults. (3mks)
- (b) With the aid of well labeled diagrams describe the formation of the Rift valley by tensional forces. (8mks)
- (c) (i) Distinguish between Orogeny and Orogenesis. (2mks)
(ii) Identify three orogenies of fold mountain formation. (3mks)
- (d) Students in your school carried out a field study in a faulted landscape.
(i) State three reasons why it was necessary to pre-visit the area of study. (3mks)
(ii) Give two advantages of collecting samples as a method of data collection. (2mks)
(iii) List two challenges you are likely to encounter during the field study. (2mks)
9. (a) (i) Differentiate between Masswasting and weathering. (2mks)
(ii) Apart from plants, give three other factors that influence the rate of weathering.

(3mks)

(b) (i) Describe carbonation as a process of chemical weathering. (4mks)

(ii) The diagram below represents one form of Physical weathering. Study it and answer the questions that follow:-



Identify the process shown in the diagram. (1mk)

(iv) Describe how the process named above takes place. (4mks)

(c) (i) What is Mudflow? (2mks)

(ii) State **three** causes of Mudflow. (3mks)

(d) Explain **three** effects of Mass wasting on the physical environment. (6mks)

10. (a) (i) With the aid of a well-labeled diagram describe the formation of Roche Moutonnee. (7mks)

(ii) Explain **three** conditions which lead to glacial deposition in Lowland areas. (6mks)

(b) Explain **three** positive effects of glaciation in Lowland areas. (6mks)

(c) Suppose you were to carry out a field study on land use in a glaciated lowland.

(i) Apart from conducting oral interviews, state two other methods you would use to collect information. (2mks)

(ii) State **two** advantages of using oral interviews to conduct field study. (2mks)

(iii) State **two** possible land uses they were likely to identify during the field study. (2mks)