

Name

Index Number

School

Candidate's Signature

312/1

Date

GEOGRAPHY

Paper 1

2015

2¾ hours

MAKUENI COUNTY KCSE 2015 PREPARATORY EXAMINATION

Kenya Certificate of Secondary Education

GEOGRAPHY

Paper 1

2¾ hours

Instructions to candidates

- (a) *This paper has **two** sections: A and B.*
- (b) *Answer **all** the questions in section A.*
- (c) *Answer question **6** and any other **two** questions from section B.*
- (d) *All answers must be written in the answer booklet provided.*
- (e) *This paper consists of **3** printed pages.*
- (f) *Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.*
- (g) *Candidates should answer the questions in English.*

Sponsored by H.E. Prof. Kivutha Kibwana, Governor, Makueni County.

TURN OVER

SECTION A

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

1. (a) Differentiate the process of formation of plutonic and volcanic rocks. (2 marks)
- (b) For each of the following rocks, name the resultant rock that forms after metamorphism. (4 marks)
 - (i) Mudstone
 - (ii) Limestone
 - (iii) Graphite
 - (iv) Granite
2. (a) What is a lake? (1 mark)
- (b) State **four** ways in which lakes modify the climate of surrounding areas. (4 marks)
3. Explain **two** ways in which climate influences the existence of desert vegetation. (4 marks)
4. (a) List **two** processes involved in physical weathering. (2 marks)
- (b) Identify **three** conditions that may favour occurrence of down wash. (3 marks)
5. (a) Name **two** scales used to measure the intensity of earthquakes. (2 marks)
- (b) State **three** effects of earthquakes on the physical environment. (3 marks)

SECTION B

*Answer **question 6** and any other **two** questions from this section.*

6. Study the map of Migwani 1:50,000 (sheet 121/3) provided and answer the following questions.
 - (a) (i) Name the type of map used in this question. (1 mark)
 - (ii) Give the estimate location of Kamutungu by latitude and longitude. (2 marks)
 - (iii) Give the bearing of the school at grid square 0965 from the water tank in the grid square 1169. (2 marks)
 - (iv) Measure the distance of the all weather road loose surface running from grid square 9078 to 9083. Give your answer in kilometres. (2 marks)
 - (b) Draw a rectangle 14 cm by 7 cm to represent the map to the west of Easting 04 and to the north of Northing 77. On the rectangle, mark and name: (2 marks)
 - (i) all weather road, loose surface. (1 mark)
 - (ii) the rock outcrop. (1 mark)
 - (iii) Nzeluni dispensary. (1 mark)
 - (iv) Itoloni dam. (1 mark)
 - (c) Citing evidence from the map, give three social functions of MUTITU (NDOOA) market. (6 marks)
 - (d) Explain three problems a contractor would face when constructing a road along Northing 83. (6 marks)

7. (a) (i) What are earth movements? (1 mark)
(ii) Describe what happens at a compressional boundary. (6 marks)
- (b) (i) What is faulting? (2 marks)
(ii) Apart from compressional forces, explain other processes that may cause faulting. (4 marks)
- (c) Using well-labelled diagrams, describe the formation of the Ruwenzori Mountains. (8 marks)
- (d) Explain **four** effects of faulting on the physical environment. (4 marks)
8. (a) (i) What is a hydrological cycle? (2 marks)
(ii) State **four** factors that determine the amount of surface run off. (4 marks)
- (b) (i) What is a river? (2 marks)
(ii) Differentiate between catchment area and watershed. (2 marks)
(iii) Identify two types of river erosion. (2 marks)
- (c) (i) Identify five characteristics of a river in its youthful stage. (5 marks)
(ii) Describe how a river erodes through abrasion. (4 marks)
- (d) Explain the importance of river depositional features to human activities. (4 marks)
9. (a) (i) What is an artesian well? (2 marks)
(ii) Explain three conditions necessary for the formation of an artesian well. (6 marks)
- (b) (i) What is a karst scenery? (2 marks)
(ii) Explain three factors which influence the formation of limestone features. (6 marks)
- (c) Describe how a stalagmite is formed. (5 marks)
- (d) You are supposed to carry out a field study in a karst area.
(i) Give two reasons why you would need a route map. (2 marks)
(ii) Identify two surface features you are likely to see. (2 marks)
10. (a) (i) What is soil? (2 marks)
(ii) Differentiate between bedrock and parent rock. (2 marks)
- (b) Explain **four** ways in which topography influences soil formation. (8 marks)
- (c) What is soil degeneration? (2 marks)
How do the following lead to soil degeneration?
(i) Overgrazing. (4 marks)
(ii) Heavy rainfall. (4 marks)
- (d) Your class intends to carry out a field study on soil in the school.
State **three** advantages of studying soil through fieldwork. (3 marks)