

312/1
GEOGRAPHY
PAPER 1
JULY/AUGUST 2014
TIME: 2 ¾ HOURS

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MMS JOINT EXAMINATION 2014

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

312/1
Geography
Paper 1

2 ¾ hours

INSTRUCTIONS TO CANDIDATES

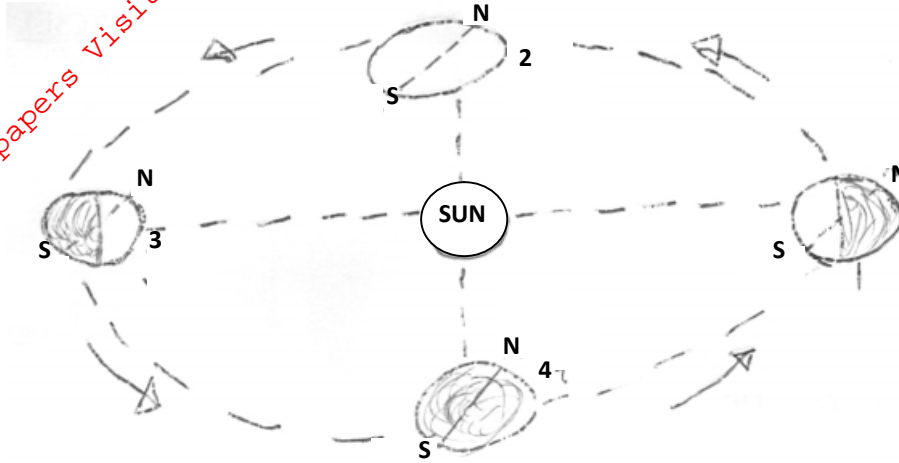
- This contains two sections **A** and **B**.
- Answer all questions in section **A**, In section **B** questions **6** and two other question.
- All answers must be written on booklet provided.
- Candidates should check and ascertain that no questions are missing.

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: 25 MARKS

Answer all questions in this section

1. (a) What is solar system? (2mrks)
- (b) The diagram below represents a movement of the earth. Use it to answer questions that follow.



- (i) Name the type of movement represented. (1mrks)
- (ii) How many days does the earth take to move from position 1 to 4 in a leap year? (2mrks)
- (iii) Give **two** effects of the movement to the earth. (2mrks)
2. (a) What is river braiding? (2mrks)
- (b) Give **two** conditions that lead to the formation of a waterfall. (2mrks)
3. (a) Describe the continental drift theory. (2mrks)
- (b) Give **two** evidence that support the continental drift theory . (2mrks)
4. (a) What is ocean salinity? (2mrks)
- (b) Give **three** ways in which island are formed in the ocean. (3mrks)
5. (a) Draw a well labeled diagram of a simple fold. On it mark and name
- trough
 - crest
 - axis
 - compressional forces
6. (a) (i) Identify the highest point of karatina area. (2mrks)
- (ii) Give the magnetic variation as January 1992. (2mrks)
- (b) Describe the drainage of the area South of easting 50 and northing 00. (6mrks)
- (c) Calculate the distance of all weather road loose surface E605 from grid 930473 to the T- junction at Chehe grid 970541. Give your answer in km and m.
- (d) Draw a cross section from grid 980460 at grid square 040470 at kariko. On it locate the following features. (4mrks)
- (i) a spur (1mrk)

(ii) all bound surface road (1mrk)

(iii) River valley (1mrk)

(e) Explain any **three** economic activities taking place in karatina area. (3mrks)

7. (a) (i) What is a desert? (2mrks)

(ii) State **four** physical factors that contributed to desert formation. (4mrks)

(b) Describe the following desert surfaces

-sandy desert (2mrks)

-rocky desert (2mrks)

(c) State **three** factors that influence wind erosion in the desert surfaces (3mrks)

(d) Explain how the following factors influence wind transportation in the deserts

(i) strength and speed of wind. (2mrks)

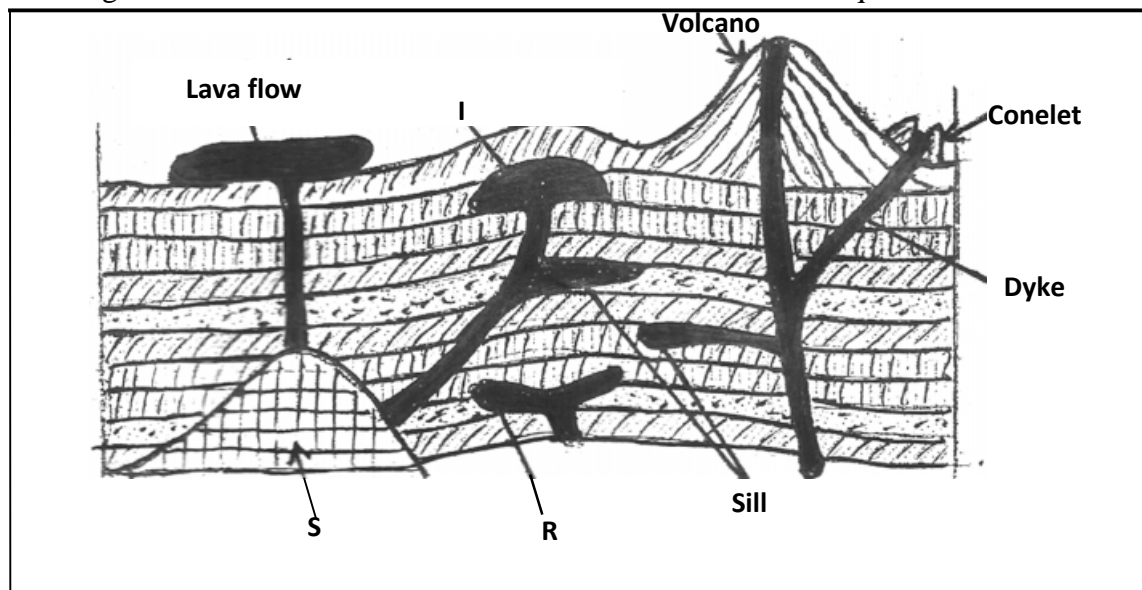
(ii) nature or weight of the load. (2mrks)

(e) Using a well labeled diagram, explain the formation of yardangs. (8mrks)

8. (a) (i) What is vulcanicity? (2mrks)

(ii) Give **two** causes of vulcanicity. (2mrks)

(b) The diagram below shows intrusive features. Use it to answer the questions that follows



(i) Name the parts that marked **T,S,** and **R.** (3mrks)

(ii) Differentiate between a sill and a dyke. (2mrks)

(c) (i) Describe the **three** cycle of a volcano (6mrks)

(ii) Give **four** characteristics of a basic lava dome. (4mrks)

(d) Explain the formation of a caldera by violent volcanic explosion. (6mrks)

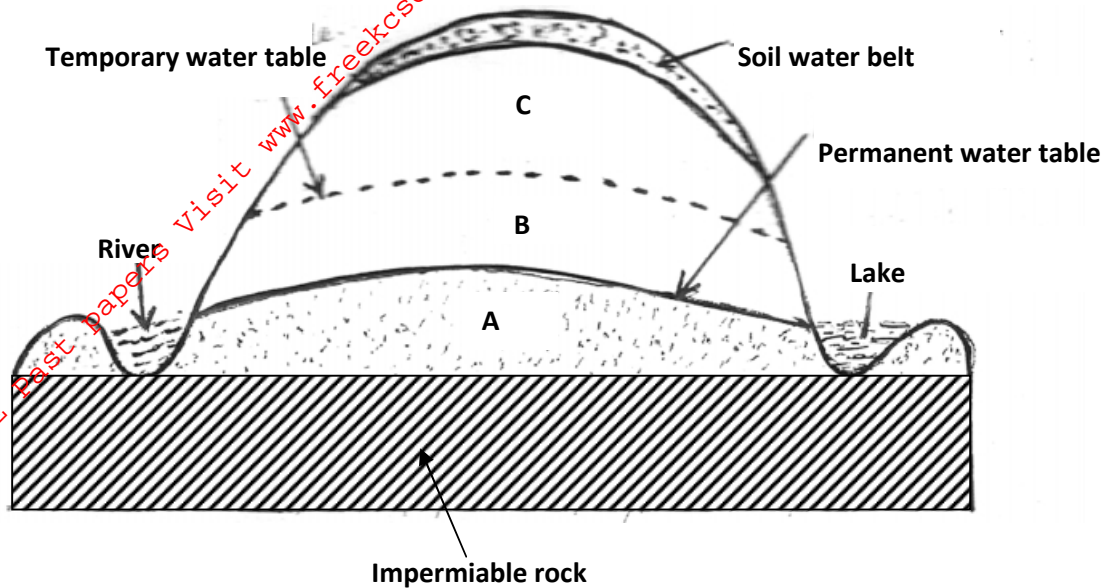
9. (a) Differentiate between infiltration and percolation of water. (2mrks)

(b) Explain how the following factors influence the existence of underground water.

(i) Amount of rainfall (2mrks)

(ii) Gradient of the slope (2mrks)

(c) The diagram below shows zones of underground water



- (i) Name the zones marked **A**, **B** and **C**,
 (ii) Explain **three** conditions that lead to the formation of an Artesian Basin and Well.

(d) (i) What is a karst scenery. (2mrks)

(ii) State **three** factors that lead to the formation of karst features. (3mrks)

(e) Describe the formation of a karst pillar. (5mrks)

10. (a) (i) What is glaciations? (2mrks)

(ii) Give **three** ways in which ice moves. (2mrks)

(b) Differentiate between valley glacier and an ice sheet. (2mrks)

(c) Explain how the following movements of valley glacier is influenced by the following factors:-

(i) Temperature changes. (2mrks)

(ii) Width of the channel (2mrks)

(iii) Gradient of the slope (2mrks)

(d) Explain **three** significance of upland glaciated features to human activities (6mrks)

(e) Suppose students in a school in Nyeri carried out a field study on a glaciations on mount Kenya,

(i) Give **three** types of moraine they are likely to study. (3mrks)

(ii) Give **three** reasons why they would need a route map. (3mrks)