

**GEOGRAPHY PP1, MOCK SERIES 1,**  
**K.C.S.E TOP EXAMINERS' 10 QUESTION PAPERS**



**GEOGRAPHY PP1, MOCK SERIES 1,**  
**K.C.S.E TOP EXAMINERS' 10 QP**

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## K.C.S.E TOP EXAMINERS' MOCK SERIES 1

### QUESTION PAPER NO: 1

312/1

GEOGRAPHY

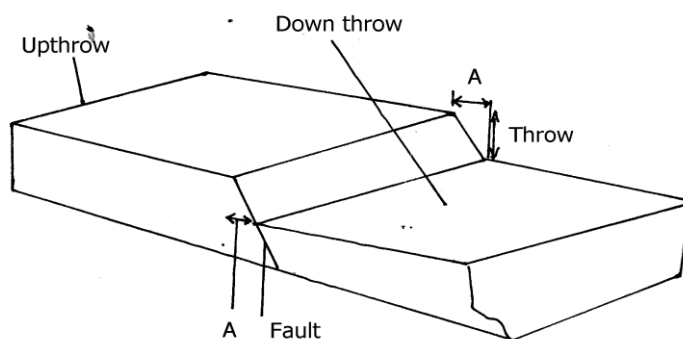
Paper 1

Time: 2 ¾ HOURS

#### SECTION A

Answer all the questions in this section in the spaces provided.

1. a) List two features resulting from extrusive volcanic activity. (2mks)  
b) State four ways in which volcanicity has influenced human activities in Kenya. (4mks)
2. The block diagram below represents part of earth's crust which has been subjected to tensional forces.



- a) Name (i) the slope marked A. (1mk)
- b) State three ways in which faulting can influence drainage systems. (3mks)

3. a) What is isobar? (1mk)
- b) List four characteristics of modified Equatorial Climate (such as experienced in the lake Victoria Basin. (4mks)
4. a) If the local time in Nairobi at longitude 37° E is 10.00 a.m.  
What will the time be at / Buchanan in Liberia at longitude 1 0°W
- b) What is the effect of the international date line on time? (2mks)
5. a) Give three examples of mechanically formed sedimentary rocks. (3mks)
- b) State two changes that occur in sedimentary rocks when they are subjected to intense heat and pressure. (2mks)

### **SECTION B**

**In this section answer question 6 and any other two questions All questions carry (25 marks)**

6. Study the map of Nkubu 1:50,000 provide and answer the questions that follow
- a) i) Name two types of scale used on the map. (2mks)
- ii) What is the circumference of lake Rumiku. (1 mk)
- b) Describe the vegetation of the area covered by the map. (5mks)
- c) Citing evidence from the map, describe the climate of the area covered by the map (4mks)
- d) i) State two methods used to show relief on this map (2mks)
- ii) What is the height of the highest point in the area covered by the map. (2 mks)
- iii) State the longitudinal extend of the area covered by the map (2mks)
- iv) What is the depth of lake Erimbere (2mks)
- (e) Draw a rectangle measuring 8cm by 6cm to cover areas between 5396,5796, 5399 and 5799. On it mark and name:
- i) Rurie swamp
- ii) Quarries
- iii) Mariara river
- iv) Dry weather road (5mks)

- 7.a)**
- i) What is river divide?
  - ii) Describe three ways by which a river transports its load
- b)** Describe the characteristics of a river in its old age
- c)** Describe each of the following drainage patterns
- i) Superimposed drainage pattern
  - ii) Centripetal drainage pattern
- d)** You have planned to carry out a study of a river in its youthful stage
- i) State two ways in which you would prepare for the study
  - ii) Name two features you are likely to study
  - iii) List two problems you are likely to experience during the study
- 8.**
- a)** List four processes through which coasts are eroded
- b)** Using well-labeled diagram, explain how each of the following features is used formed.
- i) A spit (4mks)
  - ii) A blow hole (2mks)
  - iii) An a toll (5mks)
- c)** Some student carried out a field study on the coastal features found along the coast of Kenya.
- i) List three features formed as a result of coastal emergence that they are likely to have studied. (3mks)
  - ii) State three methods the student may have used to record their data. (2mks)
  - iii) Describe two ways in which features resulting from coastal emergence are of significance of Kenya. (2mks)



- 9. a) List**
- i) Four characteristics of desert soil. **(4mks)**
  - ii) Two factors that contribute to soil leaching. **(2mks)**
- b) Explain how each of the following factors influences the formation of soil:**
- i) Parent rock **(2mks)**
  - ii) Living organisms **(2mks)**
  - iii) Topography **(2mks)**
- c) Draw a well labeled profile of mature soil. (5mks)**
- d) Explain four ways in which human activities contribute to soil erosion. (8mks)**
- 10. (a) What do you understand by the term derived vegetation. (2 mks)**
- (b) State 4 characteristics of equatorial vegetation. (4 mks)**
- (c) Explain 4 ways in which desert vegetation are adapted to the environmental conditions. (8mks)**
- (d) Explain how the following factors influence vegetation distribution in Kenya.**
- (i) Edaphic factors. **(4 mks)**
  - (ii) Human factors **(3mks)**
- (e) Students of Budonga School carried out a field study on vegetation around their school. .**
- (i) State two methods they may have used to record their data.
  - (ii) State two problems they may have encountered during their study.

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## K.C.S.E TOP EXAMINERS' MOCK SERIES 1

### QUESTION PAPER NO: 2

312/1

GEOGRAPHY

Paper1

Time: 2Hours 45 Minutes

1. (a) State how the following forces influence the shape of the earth.
    - (i) Force of gravity
    - (ii) Centripetal force
    - (iii) Centrifugal force
  - (b) State three significances of weather forecasting
  2. (a) What is an earth quake
  - (b) List three natural causes of earth quakes
  3. (a) State three characteristics of the desert climate. (3mks)
  - (b) Name two areas in Kenya that experience the tropical continental climate (2mks)
  4. (a) Name three types of drainage patterns. (3mks)
  - (b) Explain why warm air cools as it rises (2mks)
  5. (a) Name two processes of river erosion (2mks)
  - (b) Define river rejuvenation (1mk)
  - (c) State two conditions necessary for river capture (2mks)
-

**6.** Use the map of Nkubu sheet 122/1 to answer the following questions.

**(a)** Measure the all weather roads from Meru

(i) To the junction at Nkubu. **(2mks)**

Identify the relief feature found in

(ii) Grid square 3889 . **(1mk)**

**(b)** Give the compass bearing of trigonometrical station 122 ST 8 In grid square 4193 from the air photo principal point in grid square 4698 **(3mks)**

**(c)** Draw a cross section from 4792 to 5390

(i) On it indicate

- I A river valley II All weather road

- Use a vertical scale of 1cm to represent 50m. **(10mks)**

(ii) Calculate the vertical exaggeration and gradient of the cross section **(4mks)**

**(d)** Describe the drainage of the area covered by the map **(4mks)**

**(e)** Give the latitudinal and longitudinal extent of the area covered by the map. **(2mks)**

**7. (a)** (i) What is a desert **(1mk)**

(ii) Explain two process of wind erosion in deserts **(4mks)**

**(b)** With the aid of well labeled diagrams, describe how the following features are formed

(i) Rock Pedestals **(6mks)**

(ii) Yardangs **(6mks)**

**(c)** Name three features results from deposition in arid areas **(3mks)**

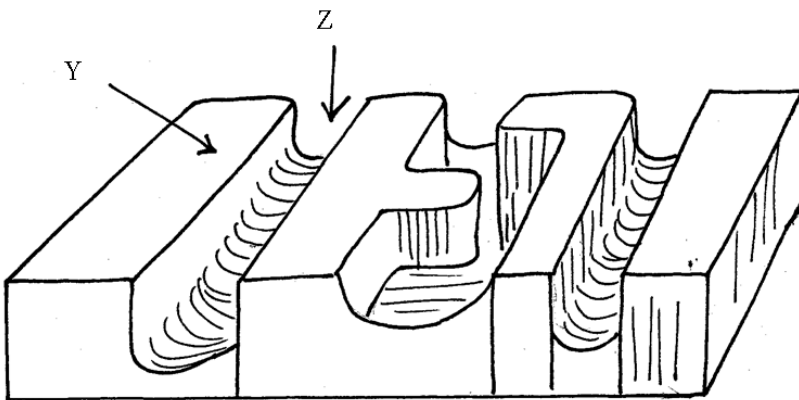
**(d)** Explain two negative effects of desert land forms **(4mks)**



8. (a) (i) Differentiate between Aridity and desertification (2mks)
- (ii) Explain how the following factors influence Aridity.
- Winds and ocean currents (2mks)
  - Continentality (2mks)
  - Pressure systems (2mks)
- (iii) State 4 possible solutions to aridity and desertification. (4mks)
- (b) (i) Define climate change (2mks)
- (ii) Explain three external causes of climate change (6mks)
- (iii) Name three Green houses gases (3mks)
- (iv) Give two evidence to support the existence of climate Change (2mks)

- 9.(a)(i) Give two sources of underground water (2mks)
- (ii) State three factors that influence occurrence of underground water. (3mks)
- (b) (i) Using diagrams describe the conditions that favour location of an artesian well (5mks)
- (ii) Study the diagram below and answer the questions that follow.

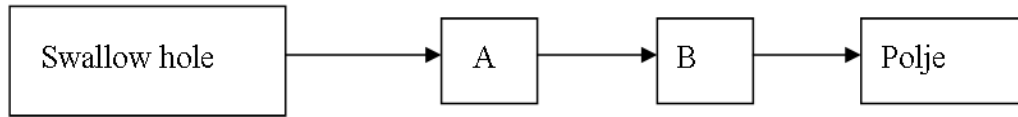
The diagram pertains to action of water in limestone areas.



Name the feature labeled Y and Z

(2mks)

- (c) (i) Complete the flow chart below concerning action of water in limestone areas.



Name the features represented by A and B

(2mks)

- (ii) Differentiate between effluent and influent rivers

(2mks)

- (d) Describe the formation of stalagmites and stalactites

(6mks)

- (e) Students of Elimu Secondary School made a field study of underground features in a karst Scenery

- (i) Suggest a little for their study

(1mk)

- (ii) Name two features they may have come across, apart from stalagmites and stalactites

(3mks)

10. (a) (i) Differentiate between a river system and river drainage basin (2mks)

- (ii) Describe three process of river erosion

(6mks)

- (b) (i) Describe the formation of an ox-bow lake

(5mks)

- (ii) Describe the process of river capture

(4mks)

- (c) (i) What is river rejuvenation?

(2mks)

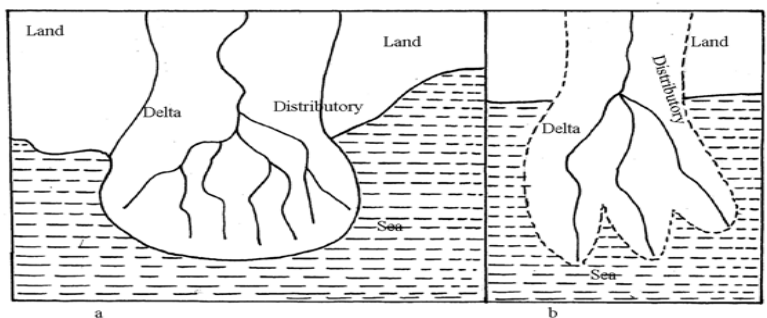
- (ii) Name two features which result from river rejuvenation

(2mks)

- (iii) Study the diagrams below and answer the questions that follow:

Name the deltas labeled (a) and (b) (2mks)

- (iv) State two significances of rivers (2mks)



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## K.C.S.E TOP EXAMINERS' MOCK SERIES 1

### QUESTION PAPER NO: 3

312/1

**GEOGRAPHY**

**PAPER I**

**TIME: 2  $\frac{3}{4}$  HOURS**

1. (a) Explain how geography is useful to a civil Engineer. (2mks)  
(b) Apart from mapwork, list any other three areas that need practical aspect (3mks)
2. (a) Name any two planets without satellites (2mks)  
(b) Explain the effect of the following forces for the shape of the earth.
  - (i) Gravitational force (1mk)
  - (ii) Centrifugal force (1mk)
  - (iii) Centripetal force (1mk)
3. (a) Name two land masses formed when Pangea broke up into northern and southern continents. (2mks)  
(b) State any three evidences supporting the continental drift theory (3mks)
4. (a) State two factors that determine the size of a lake. (2mks)  
(b) Describe how a caldera lake is formed. (3mks)
5. (a) Highlight any three factors that necessitate the occurrence of an artesian basin. (3mks)  
(b) Apart from lakes rivers and sea, name any other two sources of underground water (2mks)

6. Study the map of **Nkubu** (1:50000) sheet 122/1 provided and answer the following questions.
- (a) (i) Give the vertical interval of the area covered by the map. (1mk)  
(ii) What is the latitudinal extent of the area covered by the map. (1mk)  
(iii) Citing evidence from the map extract, mention three social activities in the area. (3mks)
- (b) (i) Give six – figure grid reference of uruku shops (1mk)  
(ii) Calculate the area of North East corner of the map extract enclosed by Meru – Mitunguu road. (3mks)  
(iii) If the area in (b) (ii) above is enlarged twice, what would be the new statement scale in km<sup>2</sup> (2mks)
- (c) Explain any two factors that may have influenced the distribution of settlement in the area covered by the map. (4mks)
- (d) (i) Draw a cross-section from grid – reference 570820 to grid – reference 570890 (3mks)  
(ii) On the cross-section, mark and name (3mks)  
- Iraru River  
- Road  
- Escarpment  
(iii) Calculate vertical exaggeration in the cross-section you have drawn (2mks)  
(iv) Apart from lakes and rivers, list any other source of water in the area covered by the map. (1mk)  
(v) The area represented by the map is part of which district (1mk)

7. (a) Define positive lapse rate (2mks)
- (b) The table below shows the climate of a station in Kenya. Study it and answer the questions that follow.

Month	J	F	M	A	M	J	J	A	S	O	N	D
Temp <sup>0</sup> C	24	25	27	29	24	26	25	26	28	26	26	24
Rainfall (mm)	124	109	119	284	235	118	104	140	215	76	107	122

- (i) Using a scale of 1cm to rep 50mm and 1cm to rep 10<sup>0</sup>C draw a combined bar and line graph to represent the data above. (6mks)
- (ii) Calculate mean annual rainfall of the station
- (iii) Describe the climate characteristic of the station (4mks)
- (c) In a weather station, explain reasons why
- (i) The rain gauge is sunk into the ground
- (ii) The top of the gauge being 30cm above the ground
- (iii) The Stevenson screen is raised 121cm above the ground
- (iv) The Stevenson screen has louvered sides (4mks)
- (d) You have been asked to carry out field study on a weather station around your school.
- (i) State any three instruments you are likely to find in the weather station. (3mks)
- (ii) State any two objectives of the study (2mks)
- (iii) What follow-up activities would you undertake (3mks)
8. (a) (i) Define weathering (2mks)
- (ii) Other than water, identify three other weathering agents (3mks)
- (iii) Give four factors that influence weathering (4mks)
- (b) Explain how the following types of weathering take place. (9mks)
- (i) Exfoliation

(ii) Carbonation

(iii) Block disintegration

(c) Students of Chepngobob Secondary School carried out fieldwork on weathering in limestone area.

(i) Name three features they may have identified **(3mks)**

(ii) State four effects of weathering on human activities **(4mks)**

9. (a) (i) List three constituents of the soil **(3mks)**

(ii) Draw a diagram of a mature soil profile **(4mks)**

(iii) List any three reasons why some soils do not develop a mature profile **(3mks)**

(b) (i) Name any three soil forming processes **(3mks)**

(ii) Explain how the following factors influence soil formation **(6mks)**

i) Time

ii) Nature of the parent rock

(c) You intend to carry out a field study on soils in your district.

(i) State four characteristics you would look for in classifying soils. **(4mks)**

(ii) Identify any two natural causes of soil degeneration you observed. **(2mks)**

10. (a) (i) Define longshore drift **(2mks)**

(ii) Name three types of Islands **(3mks)**

(b) (i) Describe any four processes involved in marine erosion **(8mks)**

(ii) State any three factors that determine the size of a wave in the open sea **(3mks)**

(c) (i) With the help of a diagram differentiate between a spit and Tombolo **(6mks)**

(ii) List any three erosional features resulting from wave. **(3mks)**



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## K.C.S.E TOP EXAMINERS' MOCK SERIES 1

### QUESTION PAPER NO: 4

312/1

GEOGRAPHY

PAPER I

TIME: 2  $\frac{3}{4}$  HOURS

#### SECTION A

1. State **three** conditions considered in choosing a suitable site for a weather station. (3mks)
2. (a) Give the reason why air cools as it rises. (2mks)  
(b) Give **three** reasons why weather forecasting is important. (3mks)
3. (a) How is an oasis formed? (3mks)  
(b) State **four** characteristics of the hot desert climate. (4mks)
4. (a) list **three** external land forming processes which lead to the formation of lakes. (3mks)  
(b) State the **two** ways in which lakes influence the natural environment. (2mks)
5. (a) Give **three** reasons why the interior of the earth is still hot. (3mks)  
(b) Outline **two** factors which influence the salinity of ocean water. (2mks)

## **SECTION B**

**Answer question 6 and any other TWO questions from this section**

**6.** Study the map provided (SAMIA 1:50000) and answer the following questions.

- (a)**
- (i) What is the six figure grid reference of the peak on wanga hill? **(1mk)**
  - (ii) Name one man-made feature found in the grid square 3509. **(1mk)**
  - (iii) What is the bearing of the point marked X from the point marked Y? **(2mks)**
  - (iv) What is the area of Lake Kanyaboli shown on the map? **(2mks)**
  - (v) What is the distance in kilometres of all weather loose surface road (C522) from the junction at grid reference 128158 to the junction near namalo school? **(2mks)**
- (b)** Draw a rectangle 14cm by 12cm to represent the area west of easting 19 and north of northing 21. On the triangle mark and name:-
- (i)** Lake Victoria. **(1mrk)**
  - (ii)** A ridge. **(1mrk)**
  - (iii)** The all weather loose surface road (C523). **(1mrk)**
  - (iv)** A seasonal swamp. **(1mrk)**
- (c)**
- (i) Citing evidence from the map, name two economic activities carried out in the area covered by the map. **(2mks)**
  - (ii) Explain three factors that influence settlement in the area covered by the map. **(6mks)**
- (d)** Students of Ukwala School carried out a field study along the course of river nzoia. Name four natural features they observed along the river course. **(4mks)**

7. (a) State **three** characteristics of the inter-tropical convergence zone (ITCZ). (3mks)
- (b) With the aid of a labelled diagram, describe how relief rainfall is formed. (6mks)
- (c) Explain **three** factors that have led to a decline of the natural grasslands in Kenya (6mks)
- (d) You are required to carry out a field study to determine the relationship between climate and vegetation in your district
- (i) Give **three** reasons why you would need a map of the district. (3mks)
- (ii) Name **two** sampling techniques you are likely to use during the field study. (2mks)
- (iii) Give **two** reasons why sampling would be appropriate for the study. (2mks)
- (iv) State **three** methods you would use to record data during the field study. (3mks)
8. (a) (i) Differentiate between aridity and desertification. (2mks)
- (ii) Name two types of desert surfaces. (2mks)
- (b) Explain **three** reasons why wind is a dominant agent of erosion in hot deserts. (6mks)
- (c) Describe **two** processes of wind erosion in deserts. (4mks)
- (d) (i) Name **three** types of sand dunes. (3mks)
- (ii) Describe how loess feature is formed. (4mks)
- (e) Students from Chalbi secondary school carried out a field study on water erosion near their school.
- (i) Name **two** features they identified. (2mks)
- (ii) State **two** problems they could have encountered during their field study. (2mks)

9. (a) State **four** types of faults. (4mks)
- (b) Explain **three** ways in which faulting can influence drainage systems. (6mks)
- (c) Describe the effect of a rift valley on the following:-
- (i) Transport. (3mks)
- (ii) Agriculture. (3mks)
- (d) (i) Describe how block mountains influence climate. (4mks)
- (ii) Give **three** significance of faulting to human activities. (3mks)
- (e) Differentiate between symmetrical folds and asymmetrical folds. (2mks)
10. (a) What is the difference between weathering and mass wasting? (2mks)
- (b) Give two processes involved in each of the following types of weathering:-
- Physical weathering. (2mks)
- (i) Chemical weathering. (2mks)
- (c) (i) Apart from plants, give four other factors that influence the rate of weathering. (4mks)
- (ii) Explain **two** ways in which plants cause weathering. (4mks)
- (d) Describe how an exfoliation dome is formed. (5mks)
- (e) Explain **three** effects of mass wasting on the environment. (6mks)

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## K.C.S.E TOP EXAMINERS' MOCK SERIES 1

### QUESTION PAPER NO: 5

312/1

GEOGRAPHY

PAPER I

TIME: 2 ¾ HOURS

SECTION A

Answer ALL the questions in this section

1. The diagram below shows the structure of the earth. Use it to answer question (a).

a) Name the parts marked E and F. (2mrks)

b) State **three** characteristics of the troposphere. (3mrks)

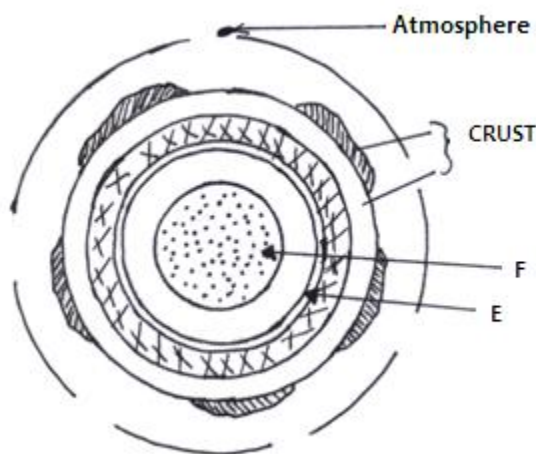
2. a) Identify **two** forms of rock metamorphism. (2mrks)

b) State the extrusive equivalent of the following intrusive igneous rocks.

i) Granite (1mrk)

ii) Diorite (1mrk)

iii) Gabbro (1mrk)



3. a) What is a seismic wave. (2mrks)

b) State **three** ways in which earthquakes affect human activities. (3mrks)

4. a) Differentiate between illuviation and salinization. (2mrks)

b) State **three** importance of water as a soil property. (3mrks)

5. a) Identify **two** types of deltas. (2mrks)

b) State **three** conditions that are ideal for the formation of a delta. (3mrks)

## SECTION B

Answer questions 6 and any other TWO questions in this section.

6. Study the map of Nkubu 1:50,000 provided and answer the following questions.

a) i) Give the **six figure grid** reference of the trigonometrical station (other) to the north east of Gikongoro. (1mrk)

ii) Measure the length of the dry weather road from the junction at Getaiga to the junction at Kaongo. Give your answer in kilometers. (2mrks)

iii) Give the sheet number of the map to the south east of Nkubu. (1mrk)

b) i) Using a vertical scale of 1cm represents 40m, draw a cross-section along easting 56 from grid reference 560,830 to grid reference 560,890. (4mrks)

-On the cross-section mark and label the following.

River iraru. (1mrk)

Dry weather road. (1mrk)

Main track. (1mrk)

ii) Calculate the vertical exaggeration. (2mrks)

c) Describe the relief of the area covered by the map. (5mrks)

d) Form four students from Nkubu School carried out a field study on distribution of settlement in the area covered by the map.

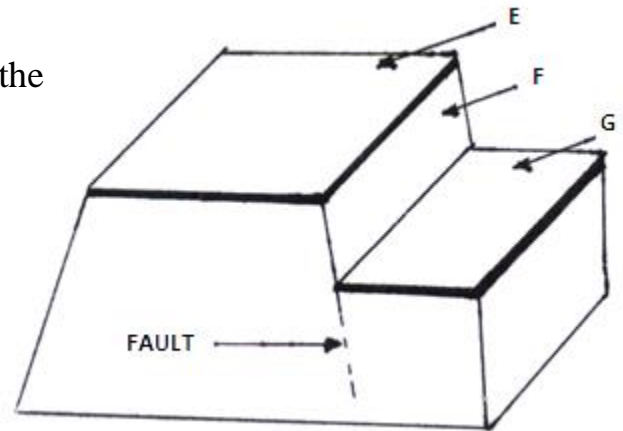
i) State two reasons why they had to divide themselves into groups. (2mrks)

ii) Identity two settlement patterns they studied. (2mrks)

iii) State three follow-up activities they might have carried after the study. (3mrks)



7. a) Differentiate between fissure and vent eruption. (2mrks)
- b) Describe how the following features are formed.
- Batholiths. (6mrks)
  - Volcanic plug (5mrks)
- c) Explain three negative effects of volcanicity on human activities. (6mrks)
- d) You are planning to carry out a field study on features formed by volcanicity on the land scape
- Formulate two null-hypotheses for the studies. (2mrks)
  - Name two drainage features you are likely to study. (2mrks)
  - State two methods you would use to record information during the study. (2mrks)
8. a) i) What is reverse fault (2mrks)
- ii) The diagram below represents an area affected by faulting. Name the parts marked E, F and G (3mrks)
- b) Describe the processes involved in the formation of the following features:
- Fault step. (5mrks)
  - Rift valley by anticlinal arching. (7mrks)
- c) Explain four ways in which block mountains influence climate. (8mrks)
9. a) Name two mountains in East Africa where congelifraction is common. (2mrks)
- b) Describe the following types of weathering:
- Pressure release. (5mrks)
  - Hydration. (4mrks)



- iii) Oxidation. (4mrks)
- c) Explain **three** ways in which plants cause weathering. (6mrks)
- d) i) what is an avalanche. (1mrk)
- ii) State **three** effects of avalanche. (3mrks)

- 10.** a) i) what is a spring? (2mrks)
- ii) Explain **three** factors that influence the occurrence of underground water. (6mrks)
- b) State **four** condition necessary for the formation of an artesian well. (4mrks)
- c) i) state **four** characteristics of karst scenery. (4mrks)
- ii) With the aid of a well labeled diagram **describe** how a stalactite is formed. (9mrks)

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## K.C.S.E TOP EXAMINERS' MOCK SERIES 1

### QUESTION PAPER NO: 6

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GEOGRAPHY

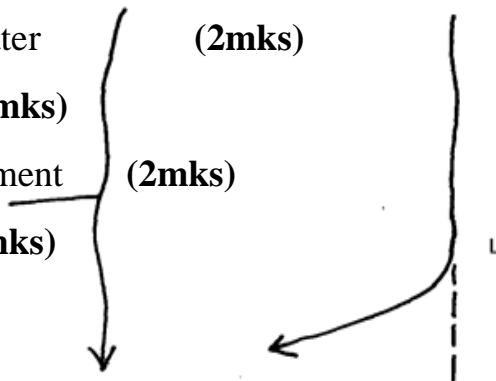
PAPER I

TIME: 2  $\frac{3}{4}$  HOURS

#### SECTION A(25 marks)

Answer all the question this section.

- 1.(a) Name **three** transitional zone of the atmosphere (3mks)
- (b) Give **two** factors that cause variation in the radiations reaching the earth's surface (2mks)
- 2.(a)(i) Define an earth tremor (1mk)
- (ii) Name **two** characteristics s – waves generated by an earthquake (2mks)
- (iii) State **two** effects of earth quakes on the physical environment (2mks)
- 3.(a) The diagram below shows a river capture. Name the parts marked K and L (2mks)
- (b) Outline **three** ways through which a gorge is formed (3mks)
4. (a) State **two** causes of vertical movement of ocean water (2mks)
- (b) Identify **three** features found on the ocean floor (3mks)
5. (a) Distinguish between mass wasting and mass movement (2mks)
- (b) Name **three** processes of chemical weathering (3mks)



## SECTION B (75 marks)

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

**6.** Study the map of NKUBU (1:50,000) sheet 122/1 provided and answer the following questions.

**(a) (i)** What feature is found at grid reference 564863? **(1mk)**

**(ii)** What is the direction of Igadance forest (grid reference 475870) from Nkuba divisional Headquarters? **(1mk)**

**(iii)** Name **three** human – made features found in grid square 5184. **(3mks)**

**(iv)** What is the vertical interval of the map? **(1mk)**

**(b)(i)** Using a vertical scale of 1 cm to represent 50m, draw a cross section from grid reference 560980. **(5mks)**

**(ii)** On the cross – section mark and label the following:

- . A road
- . A river
- . A swamp **(3mks)**

**(iii)** Calculate the vertical exaggeration of the cross – section. **(2mks)**

**(c)** Citing evidence from the map explain the reason why the area is suitable for coffee farming **(6mks)**

**(d)** Describe the relief of the area covered by the map. **(3mks)**

7.(a) (i) What is a rock?

(2mks)

(ii) Describe three ways through which sedimentary rocks are formed. (6mks)

(b) Describe the process through which sedimentary rocks change to metamorphic rocks (4mks)

(c) Give examples of each of the following igneous rocks

(i) Plutonic rock (1mk)

(ii) Hypabyssal rock (1mk)

(iii) Volcanic rock (1mk)

(d) Students from a secondary school were to carry out a field study of rocks within their district

(i) Name **three** secondary sources of information they would use to prepare for the field study (3mks)

(ii) State **four** activities they would carry out during the field study. (4mks)

(iii) State **three** problems they are likely to face during the study. (3mks)

8. (a) The diagram below shows a glaciated landscape. Use it to answer the questions that follow.

(i) Identify the feature labeled M and N (2mks)

(ii) Name **two** process through which feature marked N is formed. (2mks)

(iii) Describe how feature marked N is formed. (5mks)

(b) (i) Name **two** types of moraine (2mks)

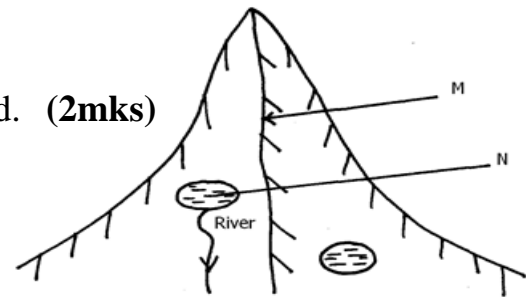
(ii) Explain **two** factors that determine the speed of ice movement (4mks)

(c) Students from a school near Mt. Kenya were planning to carry out a field study of the glaciated features on top of the mountain

(i) State **two** reasons why they need to conduct a pre-visit (2mks)

(ii) Give **three** challenges they would likely to face during their field study (3mks)

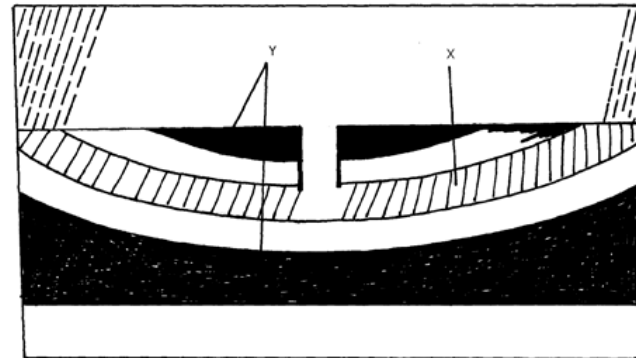
(iii) Give **five** significance of the glaciated landscape they observed during their field study on the human activities (5mks)



9. (a) Define a desert (2mks)
- (b) (i) State **four** types of deserts depending on the nature of their surfaces (4mks)
- (ii) Name **three** features in arid regions that are associated with wind deposition. (3mks)
- (c) Using well labeled diagrams describe the formation of the following resultant features of the wind erosion
- (i) Yardang (4mks)
- (ii) Rock pedestal (4mks)
- (d) Suppose you were to carry out a field study on desert land forms.
- (i) State **two** objectives and one hypothesis for your study. (3mks)
- (ii) Give **two** methods you would use to collect your data. (2mks)
- (iii) State any **three** challenges you are likely to face during your study. (3mks)

10. (a) The diagram below shows an artesian well.

- (i) Name the parts labeled X and Y (2mks)
- (ii) Explain **four** conditions necessary for the formation of artesian wells (8mks)



- (b)(i) State **three** ways in which springs form (3mks)
- (ii) Explain **three** significance of underground water to the physical and human environment (6mks)
- (c) You have been asked to carry out a field study in a Karst landscape
- (i) State **two** hypothesis of your study. (2mks)
- (ii) Give **four** reasons why it is necessary to carry out a pre- visit before the study. (4mks)



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## K.C.S.E TOP EXAMINERS' MOCK SERIES 1

### QUESTION PAPER NO: 7

312/1

GEOGRAPHY

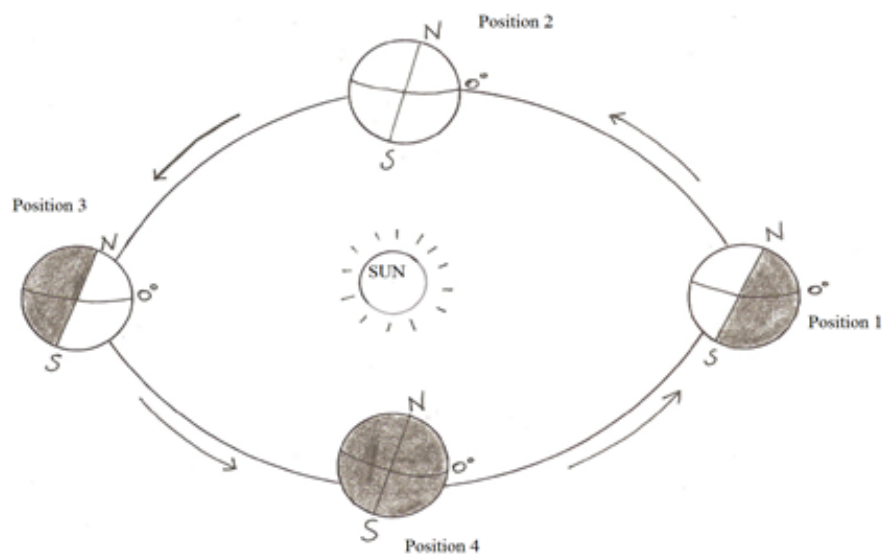
PAPER I

TIME: 2  $\frac{3}{4}$  HOURS

#### SECTION A

Answer all the questions in this section

1. (a) State two effects of the rotation of the earth (2mks)
- (b) Study the diagram below and answer the questions that follow
- (c) Which movement of the earth is represented by the diagram (1mk)
- (d) Give two effects of the movement represented by the diagram (2mks)



2. (a) What is a metamorphic rock? (2mks)

(b) Complete the table below (3mks)

Original rock	Through metamorphism changes to:
clay	
sandstone	
limestone	

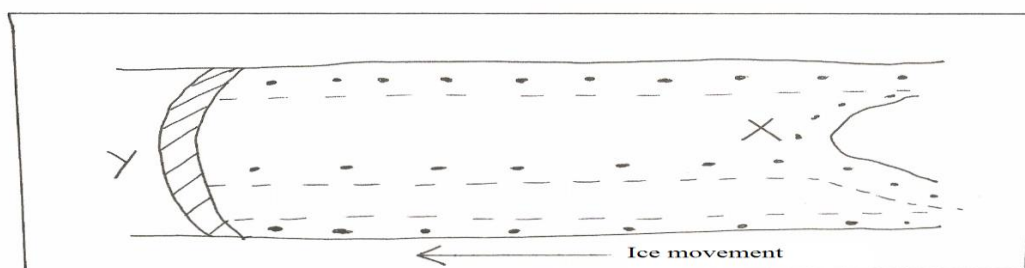
3. (a) Name 2 major types of earth movement that occurs within the earth crust (2mks)

(b) State 3 ways in which the earth's crust is affected by earthquakes (3mks)

4. (a) Name the three classes of soils based on historical development (3mks)

(b) What is soil pH? (2mks)

5. Use the diagram below to answer question (a) and (b)



(a) Name the type of movement marked X and Y (2mks)

(b) Explain how the moraine marked Y is formed (3mks)

## **SECTION B**

### **Answer Question 6 and any two other questions from this section)**

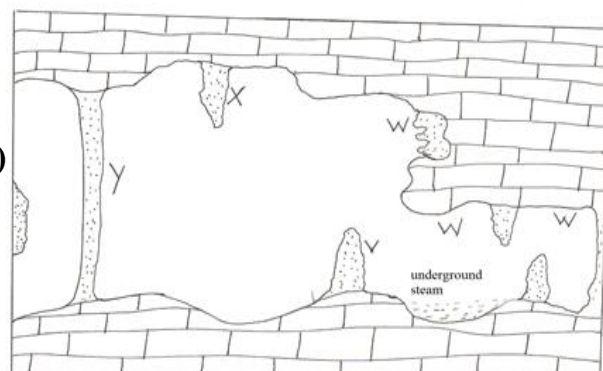
6. Study the map of Nkubu (1:50000) sheet 122/1 provided and answer the following questions

- (a) Name two man-made features found in grid square 5886. (2mks)
- (b) (i) Describe the distribution of the population at the area enclosed by Easting 56 and 60 and to the South of northing 90. (2mks)
- (ii) State three factors that are likely to have influenced the distribution of the population of the area covered by the map (3mks)
- (c) (i) What was the direction of the school at Mutiokarina from the trigonometrical station at the grid square 5689? (2mks)
- (ii) Citing evidence from the map explain four factors that may have led to the growth of Kanyakine market (8mks)
- (d)(i) Sketch the area bordered by Eastings 40 and 45 and Northing 83 and 90 in the same length and width as it appears on the map indicating the four figure grid reference for each corner (4mks)
- (ii) On the sketch map mark and label the following features:
- Thunguru hills forest (1mk)
  - Dry weather road (1mk)
  - Marungurune school (1mk)
  - Kithangari church (1mk)

7. (a) Name three types of faults (3mks)
- (b) (i) With the aid and of well-labelled diagrams, explain how tensional forces can lead to the formation of a Rift Valley (7mks)
- (ii) Give two examples of escarpments in East Africa (2mks)
- (c) Explain four ways in which features resulting from faulting are of economic importance (4mks)
- (d) You intend to carry out a field study on the landforms resulting either near your school or somewhere else
- (i) State two objectives of such a study (2mks)
- (ii) State two hypotheses for the study (2mks)
- (iii) State two methods you would use to record the information you would collect (2mks)
- (iv) What problems are likely to be faced during such a study (3mks)
8. (a) (i) Define natural vegetation (1mk)
- (ii) State four characteristics of natural vegetation found in tropical rain Forests (4mks)
- (b) Explain four ways in which vegetation found in arid areas adapts to environmental conditions of the region (8mks)
- (c) Write the names of the grasslands found in the following areas (3mks)
- (i) East Africa
- (ii) Canada
- (iii) Argentina
- (d) (i) Give two reasons why Tundra region has scanty vegetation (2mks)
- (ii) State two topographical factors that influence vegetation distribution (2mks)
- (e) State five economic importance of vegetation (5mks)

- 9. (a)** What is a river capture? **(2mks)**
- (b)** State four ways in which a river transport the load **(4mks)**
- (c)** Explain how each of the following factors determine the volume of run-off **(2mks)**
- (i) Amount and duration of rain fall **(2mks)**
  - (ii) Vegetation cover **(2mks)**
  - (iii) Permeability of the ground **(2mks)**
- (d)** A form 4 geography class is planning to carry out a field study of a water fall near their school.
- (i) State nine ways in which they would prepare for the study **(9mks)**
  - (ii) Give four methods they would use to collect information at the water fall **(4mks)**

**10.** The diagram below represents underground features in a limestone area. Use it to answer question (a)



- (a)** (i) Name the features marked X, V and W **(3mks)**
- (ii) Describe how the feature marked Y is formed **(6mks)**
- (b)** (i) What is an artesian basin **(2mks)**
- (ii) Explain 3 factors which influence the formation of features in limestone areas **(6mks)**
- (c)** You are supposed to carry out a field study of an area eroded by water
- (i) Give 3 reasons why you would need a map of the area of study **(3mks)**
  - (ii) Name 2 erosional features you are likely to identify during the field study **(2mks)**
  - (iii) State three recommendations that you would make from your study to assist the local community to rehabilitate the eroded area **(3mks)**

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## **K.C.S.E TOP EXAMINERS' MOCK SERIES 1**

### **QUESTION PAPER NO: 8**

**312/1**

**GEOGRAPHY**

**PAPER I**

**TIME: 2 ¾ HOURS**

**Answer all questions in this section**

1. Give three reasons why we study plate tectonic theory (3mks)
  - b) State two types of earth movement (2mks)
  - c) List three causes of earth movement. (3mks)
2. State three things the rotation of the earth causes (3mks)
3. State three characteristics of the mantle. (3mks)
4. Describe continental drift theory. (4mks)
5. a) State four proofs that the earth is spherical ( 4mks)
  - b) State three characteristics of inter- tropical convergence zone (ITCZ) (3mks)



## SECTION B ( 5mks)

**Answer question 6 and any other two questions in this section**

- 6.** Study the map of Kericho 1:50,000 provided and answer the following questions.
- a)** Name two types of natural vegetation found in the area covered by the map.
  - b)** Name two types of roads used in transportation in the area     **(2mks)**
  - c)** Name two man- made features found at grid square 5346     **(2mks)**
  - d)** Citing evidence from the map, state three economic activities carried out n the area. **(3mks)**
  - e)** Using a vertical scale of 1 cm to represent 20m.
    - i)** Draw a cross diction from grid reference 570670 to 620670.     **(3mks)**
    - ii)** On the cross – section marks and name the following.
      - a)** River
      - b)** Main track (motorable).     **(2mks)**
    - iii)** Calculate the vertical exaggeration of the section you have drawn. **(2mks)**
  - f)**
    - i)** Describe the relief of the area covered by the map.     **(3mks)**
    - ii)** Describe how relief has influenced settlement in the area.     **(3mks)**
  - g)** State three functions of Kericho Town     **(3mks)**

7. a) What is weathering? (4mks)  
b) State four factors that influence weathering (4mks)  
c) Describe Five processes involved in chemical weathering (10mks)  
d) Describe four physical weathering processes which take place in the arid areas (8mks)
8. a) List three factors which contribute to the development if deserts (3mks)  
b) Name three processes through which wind erodes a desert landscape. (3mks)  
c) Explain three ways through which wind transports it load. (6mks)  
d) Describe how the following desert features are formed.  
i) Yardangs (3mks)  
ii) Rock Pedestals (3mks)  
iii) Wadis  
e) State four ways in which desert features are significant to human activities. (4mks)
9. a) List four agents of deposition on the surface of the earth (4mks)  
b) Explain what causes volcanicity (6mks)  
c) Describe the following volcanic features are formed.  
i) Caldera by violet eruptions. (4mks)  
ii) Hot springs (4mks)  
iii) Composite volcano (4mks)  
d) State five ways in which volcanicity is of benefit to human activities. (5mks)

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## K.C.S.E TOP EXAMINERS' MOCK SERIES 1

### QUESTION PAPER NO: 9

#### Kenya Certificate of Secondary Education, 312/1, Geography Paper 1, SECTION A

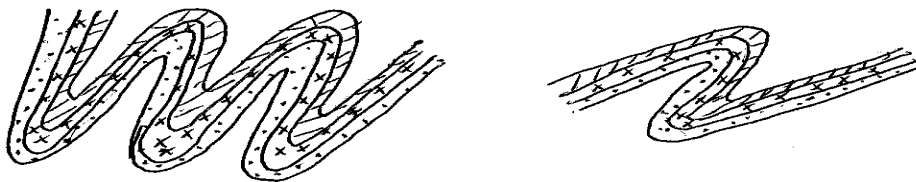
#### Answer All Questions

1. (a) Define Geography (2marks)

(b) Give two reasons to explain why the interior of the earth is hot (2marks)

(c) Distinguish between meteors and meteorites (2marks)

2. (a) Identify the types of folds shown (2marks)

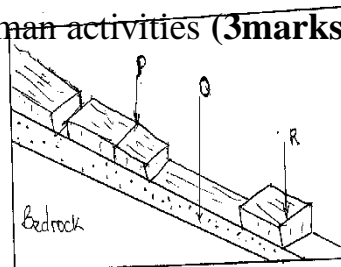


(b) State three negative effects of folding on human activities (3marks)

3. (a) State two causes of soil creep (2marks)

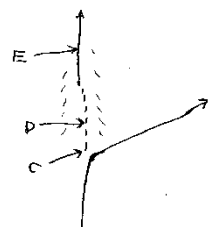
(b) The diagram below shows rock creep.

Name the parts marked P, Q, R (3marks)



4. (a) Identify the features C, D, & E shown in the diagram (3marks)

(b) State two causes of river rejuvenation (2marks)



5. (a) State two physical factors that contribute to the development of Sahara Desert. (2marks)

(b) Draw a well labeled diagram to show a Zeugen. (2marks)

6. Study the map of Kitale scale 1:50,000(sheet 75/3) provided and answer the questions that follow.

(a) (i) Give the bearing of the trigonometrical station secondary at grid 2823 from the water hole at grid 3127 **(2marks)**

(ii) Give the magnetic variation of the area covered by the map extract **(1mark)**

(b) Name three types of settlement patterns found on the map extract **(3marks)**

(c) (i) Draw a cross section from the grid reference 340280 to Kaipos trigonometrical station at grid square 3932. (Use a scale of 1cm rep. 40 m) **(2marks)**

On your cross section, mark and label the following:

(a) Dam **(1mark)**

(b) River Saiwa **(1mark)**

(c) Forest boundary **(1mark)**

(ii) Calculate the gradient between the dam and the starting point **(2marks)**

(d) (i) Explain 3 factors that favour the growing of wattle in the area covered by the map. **(6marks)**

(ii) Give two evidences showing why the area has a wet climate **(2marks)**

(e) Draw a rectangle 7.2 cm to 10 cm representing the area West of Eastings 30 and South of Northing 20 **(1mark)**

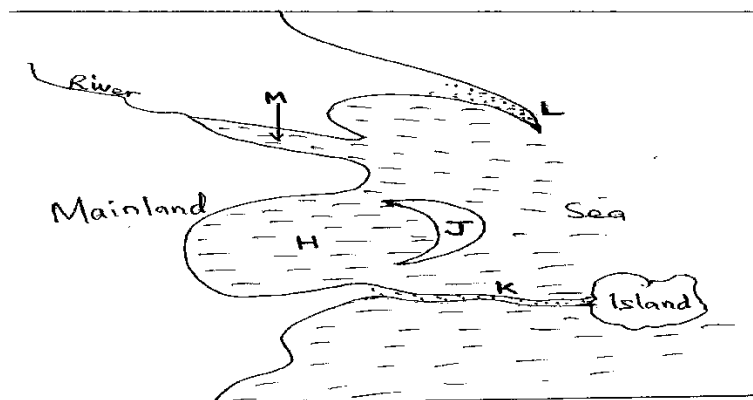
On it mark and label the following

(a) Kitale municipality **(1mark)**

(b) All weather roads loose surface **(1mark)**

(c) Koitobos river **(1mark)**

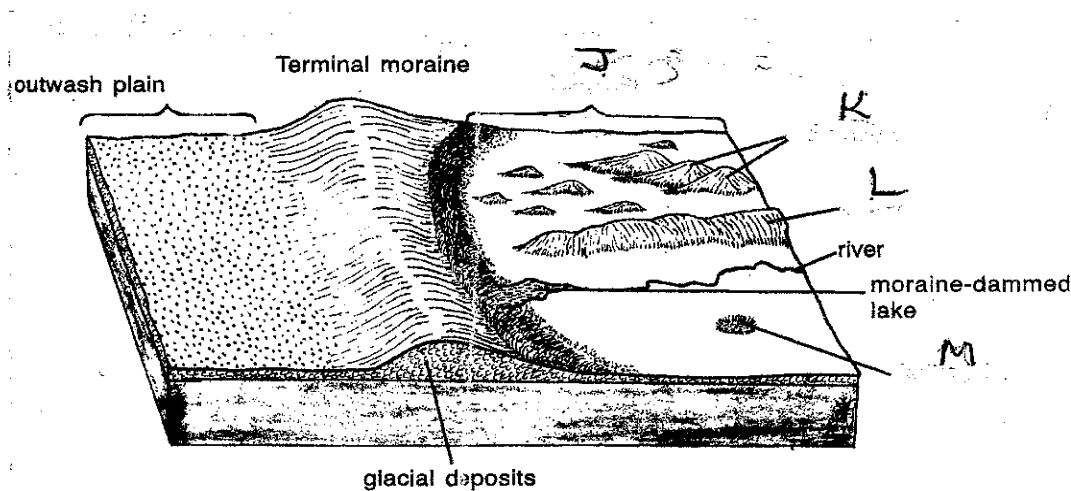
- 7. (a) (i)** Differentiate between vulcanicity & volcanicity. **(2 marks)**  
**(ii)** Draw the map of Kenya. **(1 mark)**  
 On it locate and name:  
 M-mau escarpment. **(1 mark)**  
 O-lake Magadi **(1 mark)**  
 Y – Yatta plateau **(1 mark)**
- (b)** With the aid of a well labeled diagram describe how the following features are formed:  
**(i)** Lava plateau. **(5 marks)**  
**(ii)** sill **(3 marks)**
- (c) (i)** Give two characteristics of the Gregory rift valley. **(2 marks)**  
**(ii)** You have been asked to carry out a field study on faulting in the Rift Valley, design a working schedule to use during the study. **(3 marks)**
- (d)** Explain three negative influences of vulcanicity and associated features on human activities in Kenya. **(6 marks)**
- 8. (a) (i)** Differentiate between a barrier reef and a fringing reef **(2marks)**  
**(ii)** Give three causes of oceans currents **(3marks)**
- (b)** The diagram below shows Coastal features. Use it to answer questions b (i).  
**(i)** Name the coastal features marked H, J, K, L **(4marks)**
- (c)** With the aid of diagrams describe how a wave – cut platform is formed **(6marks)**
- (d)** Explain how the following factors influence development of coasts  
**(i)** Climate **(2marks)**  
**(ii)** Gradient of the Coast **(2marks)**
- (e)** Your class intends to carry out a field study on the features along the coast of Kenya.  
**(i)** Why would they need to carry out reconnaissance **(3marks)**  
**(ii)** Give three disadvantages of using observation to collect data **(3marks)**



9. (a) Distinguish between glacial till and fluvio-glacial deposits **(2marks)**

(b) Explain three factors that determine the rate at which ice moves. **(6marks)**

(c) The diagram below shows depositional features in lowlands



(i) Name the features marked J, K, L and M. **(4 marks)**

(ii) Describe how the following features are formed:

- moraine dammed lake **(4marks)**

- outwash plain **(4marks)**

(d) Students from Meru high school intend to carry out a field study on features of glaciations on Mt Kenya

(i) Identify two methods they will use to collect data. **(2marks)**

(ii) State one negative effect they are likely to identify **(1marks)**

(iii) State two follow up activities they are likely to engage in **(2marks)**

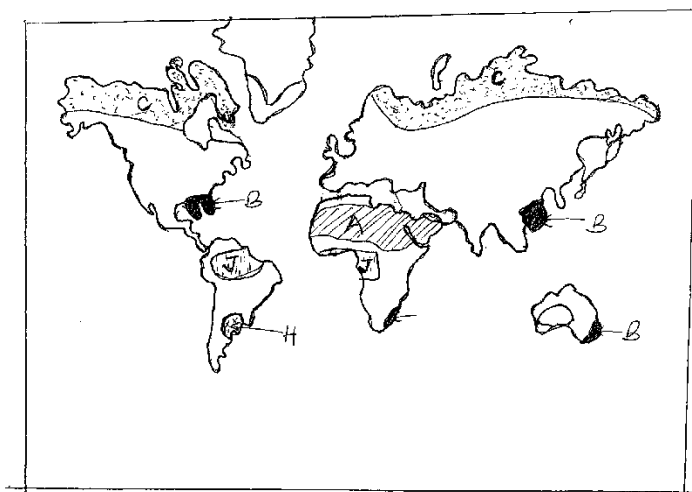
**10. (a) (i) State three characteristics of ITCZ (3marks)**

**(ii) Describe the following factors influence climate**

- configuration of the coastline (2marks)

- Distance from the sea (2marks)

**(b) Study the world map provided and use it to answer the questions below.**



**(i) Name the climatic regions A, B, C (3marks)**

**(ii) Name the vegetation type marked H & J (2marks)**

**(iii) Explain three ways in which coniferous forests have adapted to the climatic conditions (6marks)**

**(c) You carried out a field study in a marginal area experiencing encroachment of desert conditions**

**(i) State two objectives for your study. (2marks)**

**(ii) How would you record your findings during the study? (2marks)**

**(iv) Describe three findings on the causes of the encroachment (3marks)**

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## K.C.S.E TOP EXAMINERS' MOCK SERIES 1

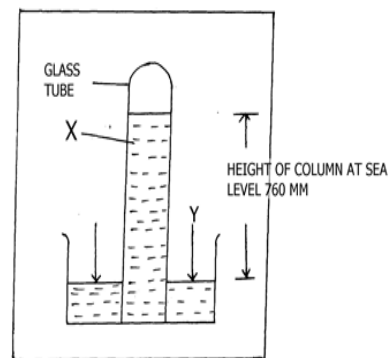
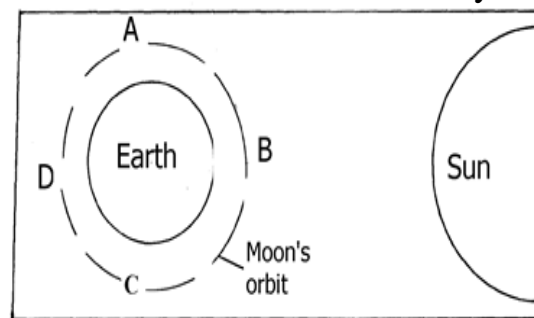
### QUESTION PAPER NO: 10

#### 312/1 GEOGRAPHY PAPER I

##### SECTION A.

**Answer ALL questions in this section**

- 1.a) List any two branches of physical Geography . (2mks)
- b) Mention any **three** practical skills acquired through studying Geography as a subject.
2. The diagram below shown the sun, earth and the orbit of the moon round the earth. Study it and answer the questions that follow.
- a) At what position is the moon likely to be for :
- i) Solar eclipse to occur (1mk)
  - ii) Lunar eclipse to occur (1mk)
- b) If the local time at longitude  $120^{\circ}\text{E}$  is 3.00 p.m.  
What will be the local time at longitude  $165^{\circ}\text{E}$ .
3. The instrument below is used to measure an element of weather. Study it and answer the questions below.
- a) i) Name the liquid marked X (1mk)
- ii) Identify the instrument shown above (1mk)
- b) Describe how the instrument above works. (3mks)
4. a) Explain briefly how the following factors influence vegetation distribution
- i) Aspect
  - ii) Precipitation
- b) Give three reasons why natural grasslands are declining in Kenya
5. a) Apart from Rift Valley, name any other two resultant features of faulting
- b) List any two types of faults





**SECTION B : Answer question 6 and any other two from this section**

**6.** Study the map of Nkubu ( 1 : 50, 000) sheet 122 / 1 provided and use it to answer the question that follow.

**a) i)** Convert the scale of the map into statement scale . **(2mks)**

**ii)** What is the approximate height of swamp to the north East of the area covered by the map.

**iii)** Using the marginal information give the magnetic variation of the area when the map extract was drawn.

**b) i)** Give two types of natural vegetation found to the East of Easting 55

**ii)** Measure the length of the section of all weather road( bound surface) from the junction in grid square 5095 to where it ends at the edge of the map extract to the north. Give your answer in Kilometres

**iii)** What is the bearing of Kithare coffee factory at grid square 5594 from the quarry at grid square 5899.

**c) i)** Using a scale of 1cm : 20m, draw a cross section from Easting 55 to the extreme end of the map along Northing 95. On it mark and label

- a river
- Dry weather road
- Dip slope

**ii)** Calculate the vertical exaggeration of the cross section above

**d)** Describe the relief of the area covered by the map

7. a) Differentiate between magma and lava. (2mks)

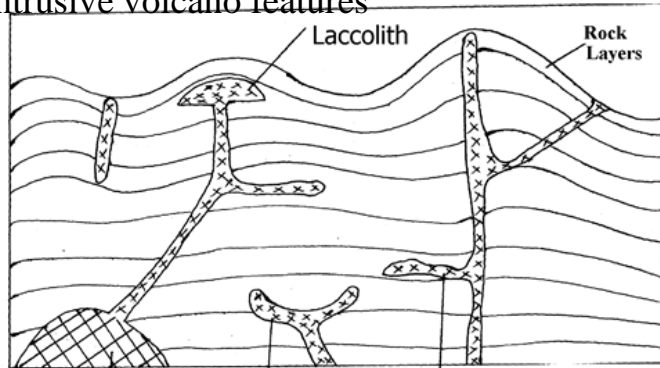
b) The diagram below shows intrusive volcano features

i) Name the features marked

F (1mk)

G (1mk)

Y (1mk)



ii) Describe how hot springs are formed, given any one example of hot spring in Kenya.

(6mks)

c) Explain four negative influences of volcanic features on human activities

d) Form two students from Moi Girls Secondary school carried out field study on volcanic rock around their school.

i) Give three reasons why it is necessary to rock samples during such a field study

ii) State three problems they are likely to experience during this study

8. a) Distinguish between mass wasting and mass movement

b) i) List any two types of slow mass wasting other than soil creep

ii) Outline three pieces of evidence of soil creep

iii) With the aid of a well-labelled diagram explain how river capture occurs

c) i) State three causes of river rejuvenation

ii) Identify two features formed as a result of river rejuvenation

d) Explain four ways in which human activity has affected rivers in Kenya

9. The diagram below shows a glaciated upland

a) Name the features marked P,Q and R

b) Describe how the following features are formed

i) U –shaped valley

ii) A fjord

c)i) Distinguish between a valley glacier and ice sheet

ii) Name any four features resulting from glacial deposition in lowlands

d)i)Form four students of manor House Academy carried out fieldwork on glaciation mount Kenya.

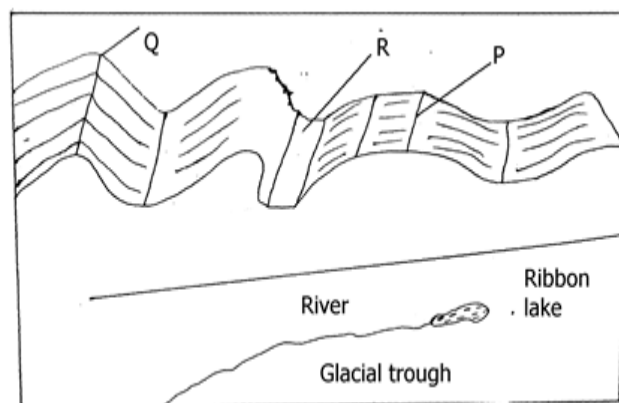
i) State two objectives of their study.

(2mks)

ii) Give three reasons why they need a route map.

(3mks)

e) Outline five significance of upland glaciated features to human activities (5mks)



10. a)i)State three processes of wind erosion in desert areas

ii)Name four features resulting from wind erosion in desert areas

b)The diagram below shows a feature formed as a result of wind deposition in desert areas

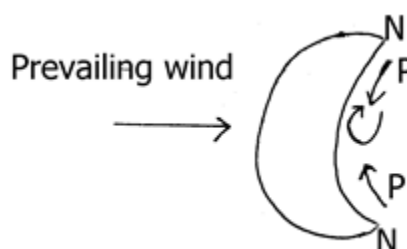
i) Identify the feature above

ii) The part labelled N

iii) The air current marked P

iv) State three conditions that are necessary

For the above feature to be formed



c) i) Name any three features of karst landscape.

(3mks)

ii) Give reasons why there are few settlements the karst landscape area

d) Outline five significance of arid landforms

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