

312/1  
GEOGRAPHY  
PAPER 1 TIME: 2 <sup>3</sup>/<sub>4</sub> HOURS

## **GEOGRAPHY PAPER 1**

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

312/1  
Geography  
Paper 1  
2 <sup>3</sup>/<sub>4</sub> Hours

### **INSTRUCTIONS TO CANDIDATES**

- This paper has two sections **A** and **B**.
- Answer all questions in section **A**.
- Answer question 6 and any other two questions from section **B**.
- Candidates should answer the questions in English.

*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.*

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## SECTION A

Answer all questions in this section

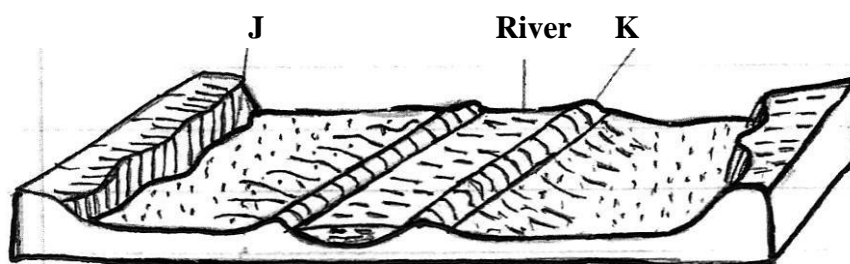
1. (a) Differentiate between vent eruption and fissure eruption (2mks)  
(b) Name **three** intrusive volcanic features (3mks)
2. (a) What is a longitude? (2mks)  
(b) What is the longitude of station **X** when it is 8.00am while in Nairobi at longitude 37°E the time is 12.00 noon? (3mks)
3. (a) State **three** causes of earth movements (3mks)  
(b) Name **two** main earthquake zones in the world (2mks)
4. (a) State **three** conditions necessary for the development of a karst scenery (3mks)  
(b) Give **two** reasons why there are a few settlements in karst landscape (2mks)
5. (a) Name **three** types of coral reefs (3mks)  
(b) What are the benefits of coral reefs in the areas they have developed? (2mks)

## SECTION B

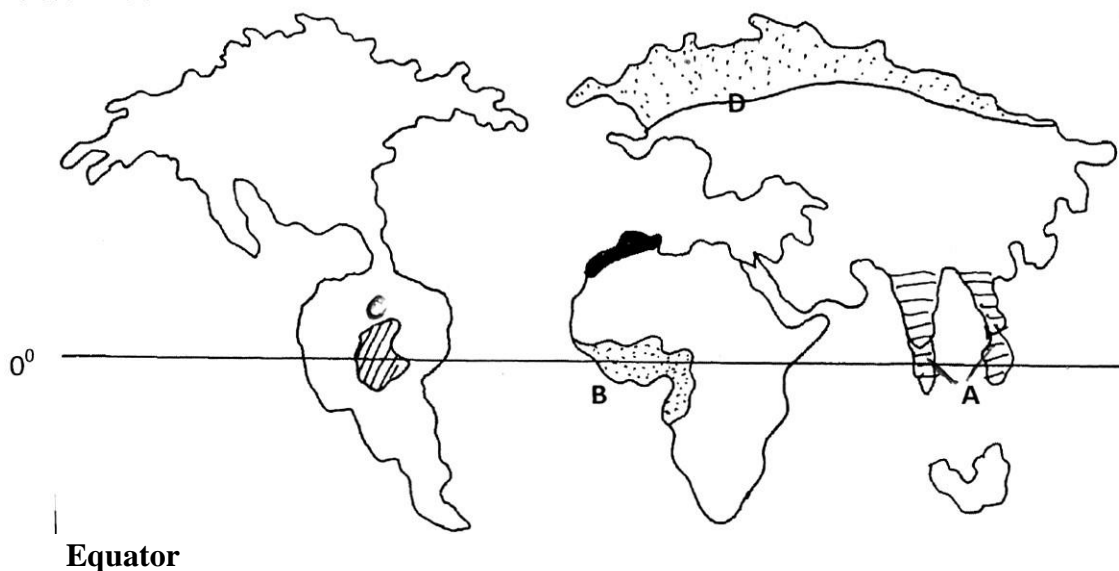
Answer question 6 and any other two questions from this section.

6. Study the map of Karatina sheet 121/3, scale 1:50,000 provided and answer the following questions
  - (a)(i) What was the magnetic declination of the map as at January 1992?  
(1mk)
  - (ii) Give the latitudinal and longitudinal extent of the mapped area. (2mks)
  - (b) (i) Apart from contours, name **one** other method used to show relief in the mapped area (1mk)
  - (ii) Calculate the area of Mt. Kenya forest reserve within Kirinyaga District shown in the map. Give your answer in square kilometers (2mks)
  - (c) (i) Apart from the houses, name two human made features in grid square 8755 (2mks)
  - (ii) Assume that four people live in each house in the grid square 8755, calculate population density (2mks)
  - (d) Describe the flow of river Sagana (3mks)
  - (e) (i) Using evidence from the map, identify **two** farming activities taking place in the mapped area (2mks)
  - (ii) Explain **three** factors which have influenced any one of the farming activities identified in (e) (i) above (6mks)
  - (f) Briefly explain how the following factors have influenced the distribution of settlements in the mapped area
    - (i) Forest Reserve (2mks)

- (ii) Rivers (2mks)
7. (a)(i) Name **two** components of soil (2mks)
- (ii) Give **two** ways in which soils are formed (2mks)
- (b) Explain how the following factors influence soil formation
- (i) Climate (4mks)
- (ii) Relief (2mks)
- (c) (i) Other than soil erosion, state **two** other ways in which soils may be degenerated (2mks)
- (ii) Briefly explain **two** effects of soil erosion to human activities (4mks)
- (d) Draw a well labeled diagram of the soil catena (3mks)
- (e) Your class members intend to conduct a field study on an area under the effect of soil erosion within their district
- (i) Name **two** types of soil erosion they are likely to identify during the study (2mks)
- (ii) State **four** soil conservation measures you are likely to recommend to the residents of study area (4mks)
8. (a) (i) Differentiate between a drainage basin and watershed (2mks)
- (ii) Identify **two** types of river erosion (2mks)
- (b) Describe **two** processes through which a river transports its load (4mks)
- (c) (i) Explain **two** causes of river rejuvenation (4mks)
- (ii) Describe how an ox-bow lake is formed (5mks)
- (d) (i) The diagram given shows a flood plain



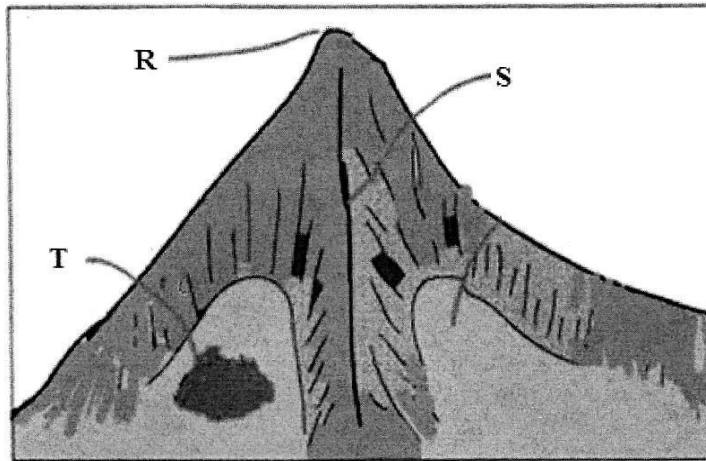
- Name the features marked **J** and **K** (2mks)
- (ii) Explain **three** positive effects of floodplains to human activities (6mks)
9. The diagram below shows the world distribution of climate types. Use it to answer questions (a)(i) and (ii)



- Equator**
- (a)(i) Name the climatic regions marked **A,B** and **D** (4mks)
- (ii) State any **four** characteristics of the climate marked **C** (4mks)
- (b)(i) Identify any **three** types of cold climates (3mks)
- (ii) Briefly explain micro climate (2mks)
- (c)(i) What is climate change? (2mks)
- (ii) Study the table and use it to answer questions (a),(b) and (c)

Months	Jan	Feb	March	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec
Temperature (°C)	28	28	27	26	23	21	21	21	23	26	26	27
Rainfall	277	213	256	107	56	33	31	28	20	132	135	234

- (a) Calculate the mean annual temperature for the station (2mks)
- (b) What is the mean annual rainfall (2mks)
- (c) State any **one** characteristics of the type of climate in the station (1mk)
- (d) (i) Explain any **two** causes of global warming (4mks)
- (ii) Name any **one** greenhouse gases (1mk)



- (i) Name the features marked **R,S** and **T** (3mks)
- (ii) Describe **two** distinctive characteristics of a fiord (2mks)
- (b)With the aid of a well labeled diagram, describe how the following features are formed
- (i)Cirque (6mks)
- (ii) Hanging Valley (4mks)
- (c) Explain **two** factors that may influence glacial erosion in uplands (4mks)
- (d) Your class intends to carry out a field study on glaciated lowland
- (i) Name **one** type of moraine you are likely to identify during the study (1mk)
- (ii)Give **two** reasons why you would need the map of the area (2mks)
- (iii) State **three** importance of glacial features you are likely to identify (3mks)