

# ALLIANCE HIGH SCHOOL



## Kenya Certificate of Secondary Education

312/1

GEOGRAPHY

PAPER 1

Trials September 2022

Time  $2\frac{3}{4}$  HOURS

Name \_\_\_\_\_ Index No. \_\_\_\_\_

Candidate's Signature \_\_\_\_\_ Date \_\_\_\_\_

### Instructions to candidates

1. This paper has two sections: A and B.
2. Answer ALL questions in sections A and two questions in section B.
3. All answers must be written in the answer booklet provided.
4. This paper consists of 6 printed pages.
5. Student should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

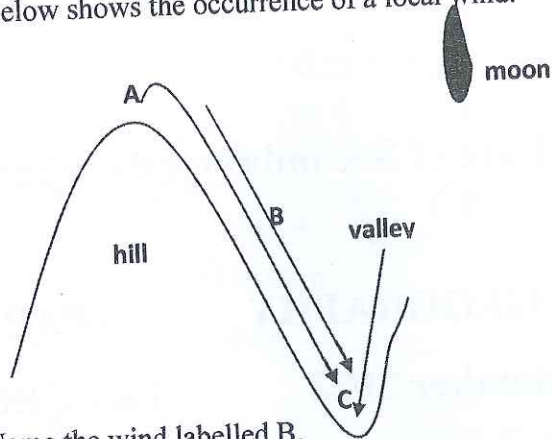
### For examiners use only

Section	Questions	Maximum score	Candidate's score
A	1-5	25	
B	6	25	
		25	
		25	
Total score			

**SECTION A**

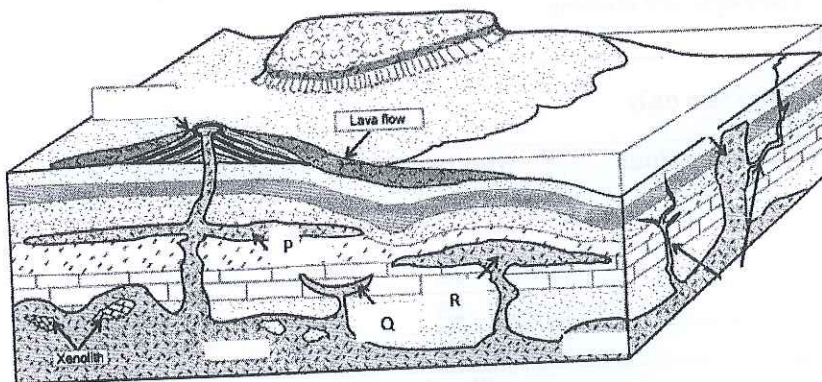
Answer all the questions in this section.

1. a) State the relationship between Geography and Medicine. (2mks)  
b) State three importance of studying geography. (3mks)
2. The diagram below shows the occurrence of a local wind.



- a) Name the wind labelled B. (1mk)  
b) Identify the air pressure at point A and C. (2mks)  
c) State two factors determining the amount of solar radiation reaching the earth's surface. (2mks)
3. a) Why are extension boundaries referred to as constructive boundaries? (1mk)  
b) Draw a well labelled diagram to show a transform fault boundary. (3mks)  
c) Name one relief features that may be formed during subduction. (1mk)
4. a) Differentiate between intensity and magnitude as measures of earthquakes. (2mks)

b) The diagram below shows intrusive volcanic features.



Identify the features labelled P, Q and R. (3mks)

5a) State three ways in which the nature of rock can influence weathering. (3mks)

b) Identify two main types of weathering common in mid-latitude regions. (2mks)

### SECTION B

Answer all the questions in this section.

6. Study the map of Kijabe (1:50,000) sheet 134/3 provided and answer the questions that follow.

- a) i) Give the vertical interval of the map. (1mk)  
ii) What is the latitudinal and longitudinal extent of the map? (1mk)  
iii) Identify any three types of natural vegetation found between Easting 30 and 35. (3mks)

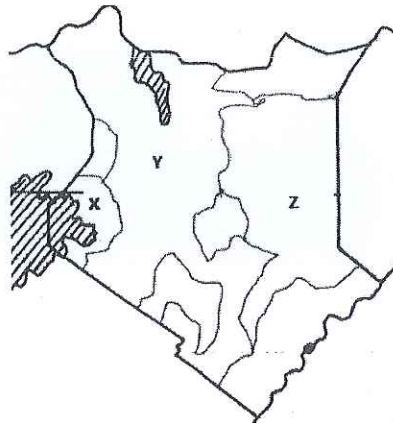
b) i) Using a vertical scale of 1cm to represent 100 m, draw a cross-section between grid reference 240930 to 260000. (5mks)

- ii) On the cross-section. Mark and label the following.  
- all weather road bound surface (1mk)  
- river (1mk)  
- hill (1mk)  
iii) Calculate the vertical exaggeration of the cross-section you have drawn (2mks)

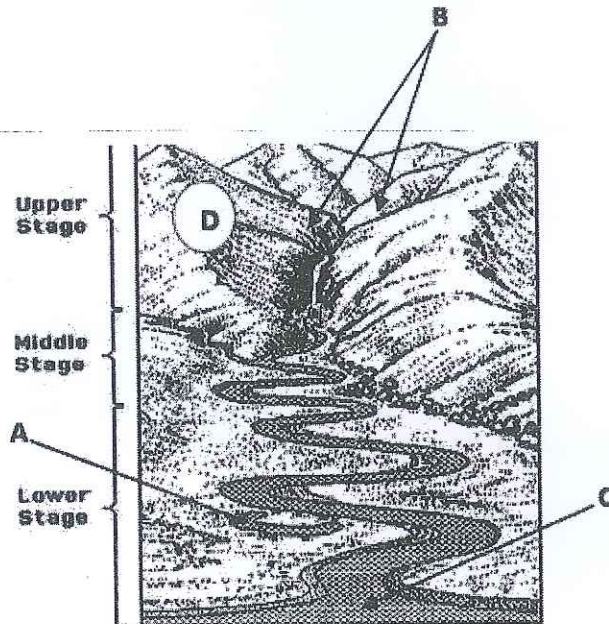
- b) i) Citing evidence identify three social functions in the area covered by the map. (3mks)  
ii) Describe the drainage of the area covered by the map. (4mks)  
iii) State three factors influencing the distribution of settlements in the area covered by the map. (3mks)

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

b) The map below shows the distribution of rocks. Use it to answer the questions that follow.

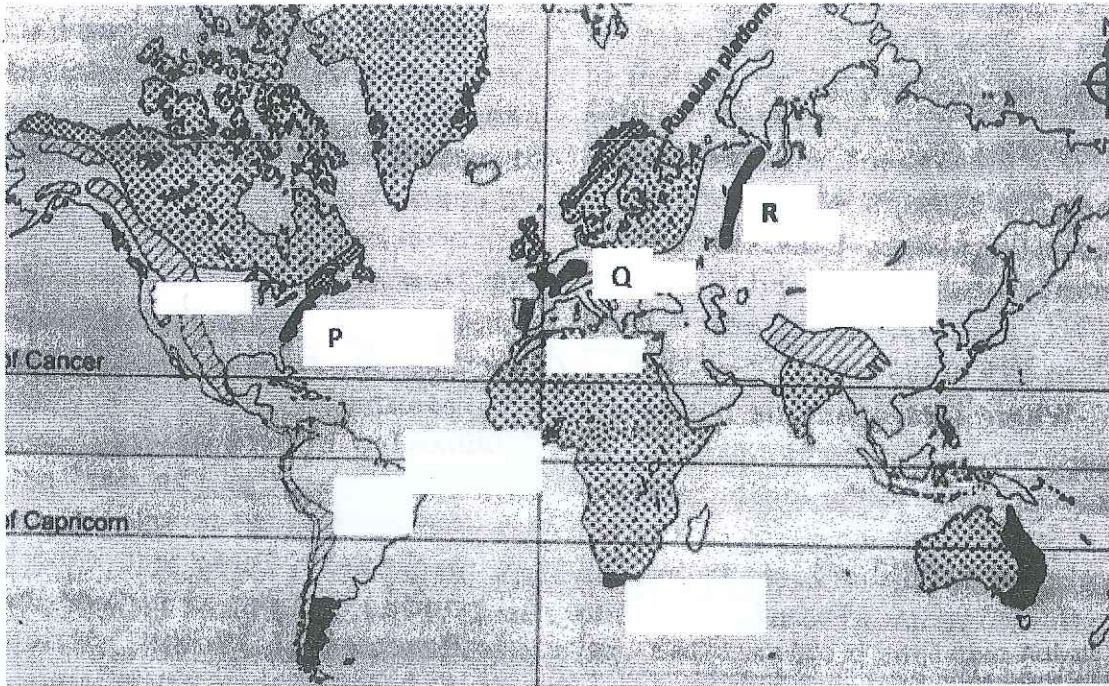


- i) Identify the rocks marked Y and Z. (2mks)  
 ii) Explain the formation of chemically formed sedimentary rocks. (3mks)  
 iii) Explain three ways in which rocks are significant to human activities. (6mks)
- c) i) What is rock metamorphism? (2mks)  
 ii) Explain three processes of rock metamorphism. (6mks)
- d) You intend to carry out a field study on types of rocks near your school.  
 i) Give an example of each of the following types of rocks you are likely to identify:  
 • hypabyssal igneous rocks (1mk)  
 • chemically formed sedimentary rocks (1mk)  
 ii) State two activities you are likely to be involved in during the study. (2mks)
8. a) i) What is River regime? (1mk)  
 ii) Describe corrasion process in river erosion. (2mks)  
 b) The diagram below shows the long profile of a river. Use it to answer questions (i), ii), (iii)



- i) Identify the features marked A, B C and D. (4mks)  
 ii) Describe the formation of a natural levee. (3mks)  
 iii) Outline the significance of such a river. (4mks)
- c) i). Describe Trellis drainage pattern. (5mks)  
 ii) With the aid of well labeled diagrams, describe how the feature marked A is formed. (6mks)
9. a) i) Apart from fold mountains, name two other features resulting from folding. (2mks)  
 ii) Explain how fold mountains were formed according to contraction theory. (3mks)
- b) i) Define the term orogenesis. (1mks)  
 ii) Name two fold mountains formed during the Alpine orogeny. (2mks)  
 iii) State two factors influencing folding of sedimentary rocks. (2mks)

c) i) Use the world map provided and answer the questions that follow.



Name the mountain ranges marked P, Q and R.

(3mks)

ii) Draw a well labelled diagram of each of the following types of folds.

- Overfold.
- Isoclinal folds.

(2mks)

(2mks)

d) i) Explain two negative effects of folding to human activities.

(4mks)

ii) Explain two ways in which fold mountains influence climate in a region.

(4mks)

10 (a) (i) Define the term ocean.

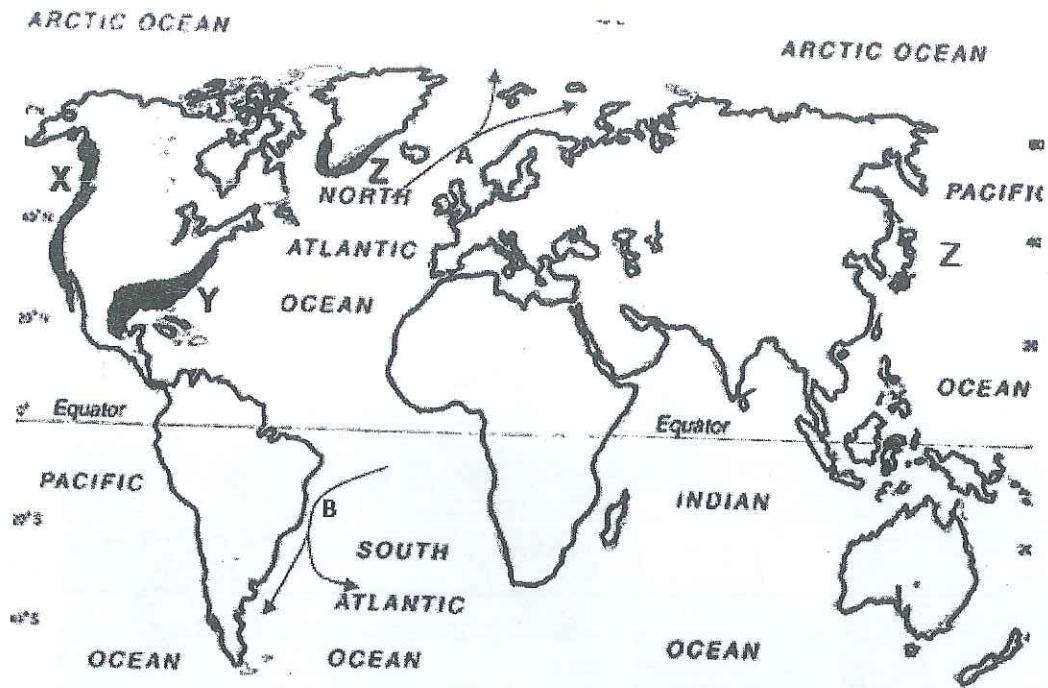
(2mks)

(ii) Explain two factors influencing horizontal movement of ocean water.

(4mks)

(iii) Describe how a wave breaks.

(4mks)



- b) Name the ocean currents marked A and B. (2mks)
- c) Describe how a Geo is formed. (4mks)
- d) (i) Using well labelled diagram, describe the formation of Cuspate foreland. (5mks)
- (ii) Explain two ways in which Kenya can benefit from its coastal landforms. (4mks)