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 5 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.
SECTION A

Answer ALL the questions in this section.

1. (a) Define the term Moon. (2 marks)
   (b) Give three reasons which explain why the interior of the earth is still very hot, millions of years after its formation. (3 marks)

2. (a) Differentiate between vent eruption and fissure eruption. (2 marks)
   (b) Name three intrusive volcanic features. (3 marks)

3. The diagram below shows the process of hydrological cycle.

   (a) Identify the processes taking place at points marked P, Q, and R. (3 marks)
   (b) Give two significance of hydrological cycle. (2 marks)

4. (a) State two reasons why lake Naivasha is fresh water. (2 marks)
   (b) Identify three problems facing Lake Victoria. (3 marks)

5. (a) What is an artesian basin? (2 marks)
The diagram below represents underground features in a limestone area. Use it to answer question 5(b).

(b) Identify features marked K, L and M. (3 marks)

SECTION B

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

6. Study the Map of Kitale 1:50,000 (Sheet 75/3) provided and answer the following questions.

(a) (i) Give a six figure grid reference of the junction where the road C641 meets with the road C638 in Kitale Municipality. (2 marks)

(ii) Using the marginal information, give the magnetic variation of the area when the map extract was drawn. (2 marks)

(b) (i) Give the approximate height of the dam in grid square 3630. (2 marks)

(ii) Calculate the area of Kitale Municipality shown on the map. Give your answer to the nearest square kilometer. (2 marks)

(c) (i) Using a scale of 1cm to represent 40 metres, draw a cross section from grid reference 370240 to grid reference 440240. (4 marks)

(ii) On the Cross Section, mark and name the following:
- River Kapolet. (1 mark)
- Steep slope (1 mark)
- Forest boundary. (1 mark)

(iii) Calculate the vertical Exaggeration (VE) of the Cross Section. (2 marks)

(d) Citing evidence from the map, name three economic activities carried out in the area covered by the map. (3 marks)

(e) Describe the drainage of the area covered by the map extract. (5 marks)
7. (a) What is faulting? (2 marks)

b) (i) Differentiate between a reverse fault and a shear fault. (2 marks)

(ii) Apart from the types of fault mentioned in b (i) above, name any other two types of faults. (2 marks)

c) List down three examples of fault scarps in Kenya. (3 marks)

d) With the aid of well labelled diagrams, describe how tensional forces can lead to the formation of a Rift Valley. (8 marks)

e) Explain four negative influences of faulting on the human environment. (8 marks)

8. (a) Name the temperate grasslands found in:- (3 marks)

i) North America.

ii) Australia

iii) South Africa

(b) Describe five characteristics of the Savanna type of Vegetation. (5 marks)

(c) Explain how the following factors affect the distribution of vegetation in Kenya. (2 marks)

(i) Variation in rainfall.

(ii) Aspect.

(d) You are required to carry out a field study of vegetation around your school. (3 marks)

(i) Identify three methods you would use to record data.

(ii) State two problems likely to be encountered during the field study. (2 marks)

(e) Describe four ways in which Mountain vegetation is significant to human activities. (8 marks)

9. (a) (i) Apart from a valley glacier name two other types of ice masses found on mountains in East Africa. (2 marks)

(ii) Name three types of moraine. (3 marks)

(b) With aid of well labelled diagrams, describe the process involved in the formation of a corrie. (7 marks)

(c) Give two characteristics of a pyramidal peak. (2 marks)

(d) (i) Explain four ways in which a glaciated landscape is of significance to human activities. (8 marks)

(ii) A group of students went out for fieldwork to study action of ice on Mount Kenya summit. Give three primary methods of collecting data they may have used. (3 marks)
10. (a) On the sketch map of Kenya provided, name climatic regions shaded T, U, V and W. (4 marks)

(b) (i) Name any two areas that experience Desert Climate in Africa: (2 marks)

(ii) Describe five characteristics of Tropical Desert climate. (5 marks)

(c) Explain how the following factors influence climate.
(i) Latitude. (2 marks)
(ii) Distance from the sea/ Continentality. (2 marks)
(iii) Wind/ Air Masses. (2 marks)

(d) Explain four effects of climate change on the physical environment. (8 marks)