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 6 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) What is the relationship between Geography and Mathematics? (2 marks)

(b) State four reasons why it is important to study Geography (4 marks)

2 (a) Name the two layers of discontinuity that are part of the interior structure of earth. (2 marks)

(b) State three characteristics of the outer core in the interior structure of the earth (3 marks)

3 (a) Name two forms of precipitation that commonly occur in Kenya (2 marks)

(b) What is a Stevenson’s screen? (2 marks)

4 (a) Identify two causes of earth movement (2 marks)

The diagram below shows some features formed as a result of faulting

(b) Identify:
   (i) the angle marked J (1 mark)

   (ii) the features marked K and L (2 marks)

5 (a) Identify two sources of water found in a lake (2 marks)

(b) Give three characteristics of lakes formed due to faulting (3 marks)
6. Study the map of Kitale 1:50,000 (sheet 75/3) provided and answer the following questions.

(a) (i) Identify the two human made features found at the grid square 2320. (2 marks)

(ii) What is the attitude of the highest point in the area covered by the map? (2 marks)

(iii) Give three types of natural vegetation found in the area covered by the map (3 marks)

(b) (i) What is the bearing of the Air Photo Principal Point at grid square 3426 from the Air Photo Principal Point at grid square 2931? (2 marks)

(ii) Measure the distance of the dry weather road (C 640) from the junction at point M (345142) to the junction at point N (416201). Give your answer in Kilometres. (2 marks)

(c) (i) Using a scale of 1cm to r represent 40 metres, draw a cross section from grid reference 410180 to grid reference 500180. (4 marks)

(ii) On the cross-section, mark and name the following:
   - A dry weather road; (1 mark)
   - River Kaptarit; (1 mark)
   - A ridge (1 mark)

(iii) Calculate the vertical exaggeration (VE) of the section (2 marks)

(d) Citing evidence from the map, identify five social services offered in Kitale Municipality. (5 marks)

7 (a) (i) What is a mineral? (2 marks)

(ii) Describe the following characteristics of minerals:
   - Luster (2 marks)
   - Colour (2 marks)
   - Density (2 marks)

(b) (i) Name two examples of extrusive igneous rocks (2 marks)
(ii) Describe three ways in which sedimentary
(9 marks)

(c) Explain the significance of rocks to the economy of Kenya under the
following subheadings:

(i) tourism: (2 marks)
(ii) energy; (2 marks)
(iii) water (2 marks)

8 (a) Explain the following processes of weathering:

(i) hydration (2 marks)
(ii) oxidation (2 marks)
(iii) frost action (2 marks)

(b) Describe how an exfoliation dome is formed (6 marks)

(c) Explain three physical factors that enhance movement of materials along a
slope due to gravity. (6 marks)

(d) (i) Give two processes of rapid mass movement (2 marks)
(ii) State four indicators of occurrence of soil creep in an area (4 marks)

9. (a) (i) Outline two factors that influence the development of drainage
patterns (2 marks)
(ii) Outline five characteristics of a river in its youthful stage (5 marks)

(b) Describe the following processes of river erosion:

(i) attrition; (2 marks)
(ii) corrosion (4 marks)

(c) Explain three negative effects of rivers to the human environment (6 marks)

(d) Your class is planning to carry out a field study of a river in its old stage

(i) State three reasons why it would be necessary to pre-visit the area
of study. (3 marks)
(ii) State three activities you would carry out to determine why
deposition occurs at this stage. (3 marks)
10. (a) 

(i) Define the term soil

(ii) Give two factors that determine soil leaching

(b) Explain how the following factors influence soil formation

(i) parent rock

(ii) biotic factors

(c) 

(i) State three characteristics of desert soils

(ii) Give two economic uses of soils

(d) You are supposed to carry out a field study of an eroded area

(i) What information would you collect through observation that would indicate that the area is severely eroded?

(ii) Identify three methods you would use to record the observations

(iii) State three recommendations you would give to control soil erosion