

321/1  
GEOGRAPHY  
Paper 1  
Oct./Nov. 2012  
2  $\frac{3}{4}$  hours

THE KENYA NATIONAL EXAMINATIONS COUNCIL  
Kenya certificate of Secondary Education  
GEOGRAPHY  
Paper 1  
2  $\frac{3}{4}$  hours

312/1 – Geography Paper 1 Tuesday      11.30 am – 2.15 pm 06/11/2012    (2 <sup>nd</sup> Session)
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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.

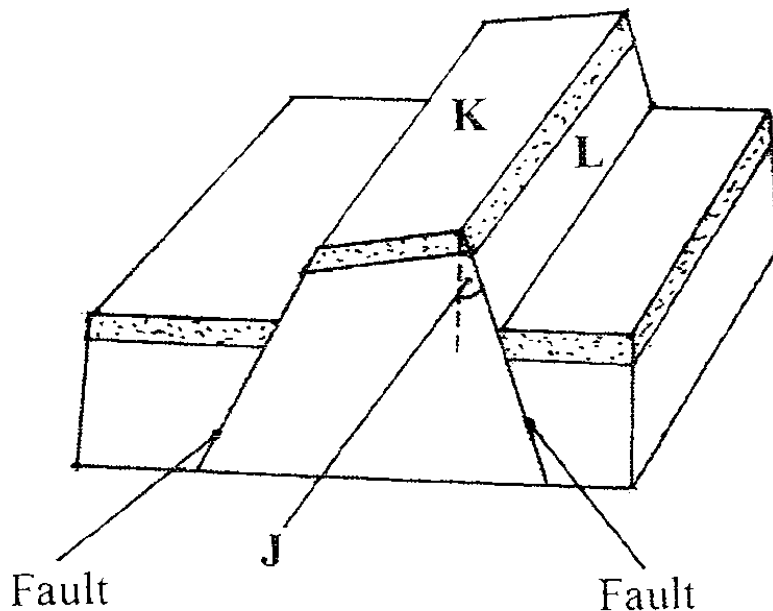


SECTION A

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)



## 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) 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 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 (2 marks)
- (ii) Give two factors that determine soil leaching (2 marks)
- (b) Explain how the following factors influence soil formation
- (i) parent rock (4 marks)
- (ii) biotic factors (4 marks)
- (c) (i) State three characteristics of desert soils (6 marks)
- (ii) Give two economic uses of soils (2 marks)
- (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? (2 marks)
- (ii) Identify three methods you would use to record the observations (3 marks)
- (iii) State three recommendations you would give to control soil erosion (3 marks)

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