

4.2 GEOGRAPHY (312)

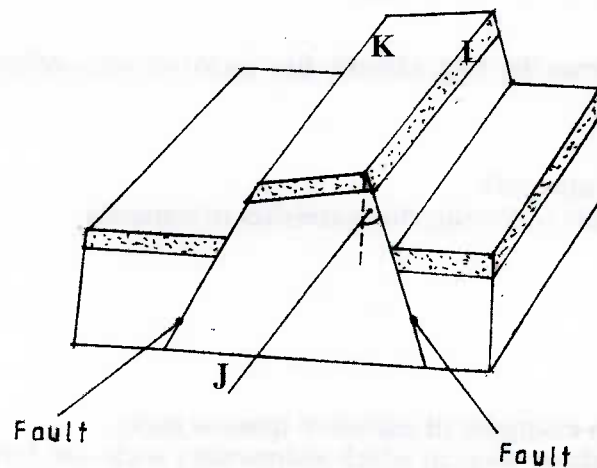
4.2.1 Geography Paper 1 (312/1)

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 Stevensons 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 the:
 - (i) angle marked **J**. (1 mark)
 - (ii) 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 altitude 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 **Mh(345142)** to the junction at point **N(416201)**. Give your answer in Kilometres. (2 marks)
- (c) (i) Using a scale of 1 cm 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:
• lustre; (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 rocks are formed. (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. (3 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) corrasion. (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. (3 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)

4.2.2 Geography Paper 2 (312/2)

SECTION A

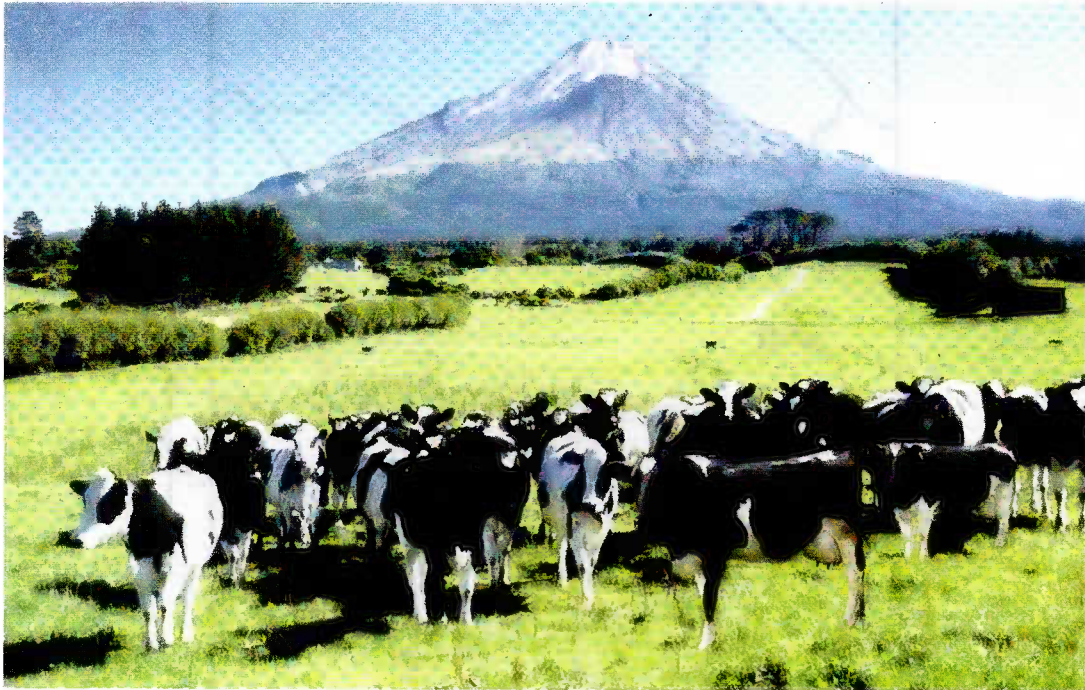
Answer all the questions in this section.

- 1 (a) What is mining? (2 marks)
- (b) State **four** benefits of Soda Ash mining to the economy of Kenya. (4 marks)
- 2 (a) Name **two** methods used in deep sea fishing. (2 marks)
- (b) State **three** ways in which the government of Kenya is promoting the fishing industry. (3 marks)
- 3 (a) Apart from the sun, name **three** other sources of electricity. (3 marks)
- (b) Give **three** advantages of using solar energy. (3 marks)
- 4 Give **three** reasons why it is necessary for the government of Kenya to carry out a national census. (3 marks)
- 5 (a) Identify **two** methods used to control tsetse flies in Kenya. (2 marks)
- (b) State **three** negative effects of uncollected garbage on the environment. (3 marks)

SECTION B

Answer questions 6 and any other *two* questions in this section.

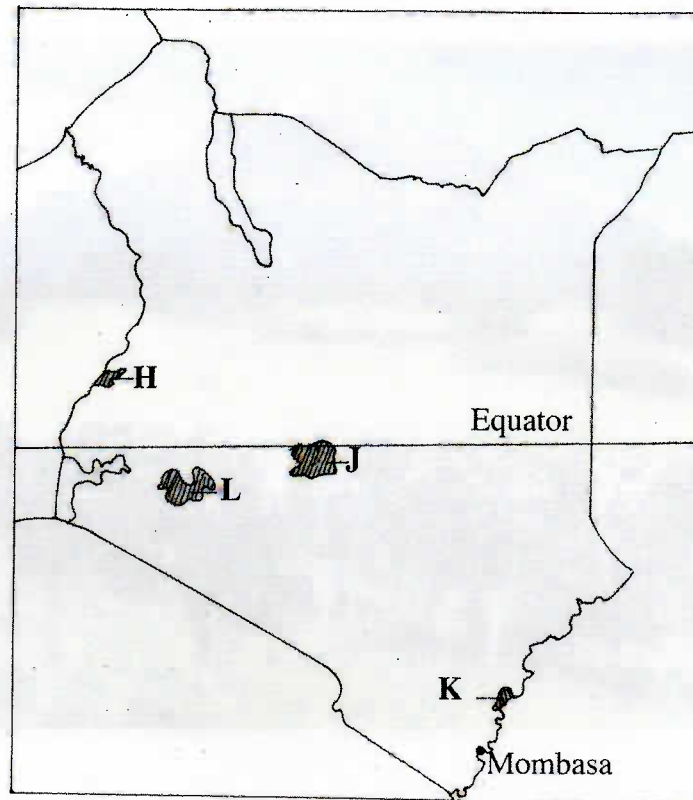
- 6 Study the photograph below and answer question (a)



Source: Internet

- (a) (i) Identify the type of photograph shown above. (1 mark)
- (ii) Draw a rectangle measuring 15 cm by 10 cm to represent the area covered by the photograph. (1 mark)
- (iii) On the rectangle, sketch and label **four** main features shown on the photograph. (4 marks)
- (iv) Using evidence from the photograph, identify **two** indicators that show that the area receives high rainfall. (2 marks)
- (b) (i) Name **three** exotic types of dairy cattle reared in Kenya. (3 marks)
- (ii) Explain **three** human factors that favour dairy farming in the Kenya Highlands. (6 marks)
- (c) Explain **four** ways in which dairy farming in Kenya is different from dairy farming in Denmark. (8 marks)

- 7 (a) (i) What is agro-forestry? (2 marks)
- (ii) Give **four** reasons why agro-forestry is encouraged in Kenya. (4 marks)
- (b) Use the map of Kenya below to answer questions b(i) and (ii).

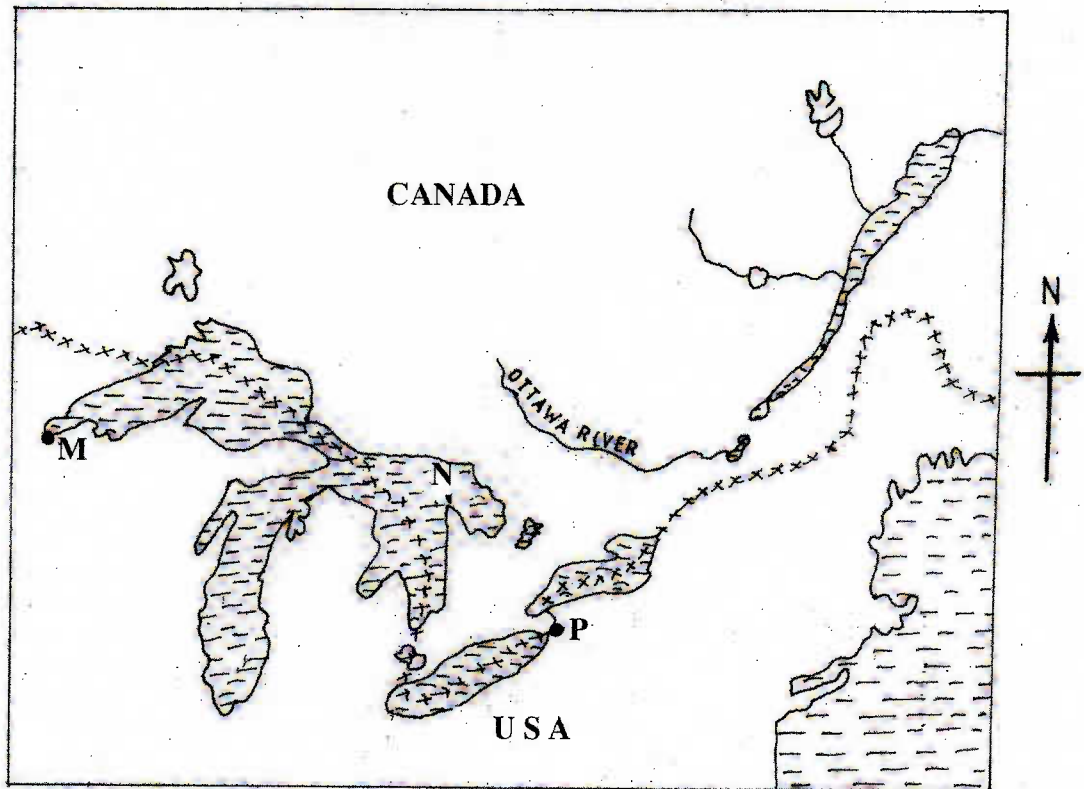


- (i) Name the forest resources marked **H**, **J** and **K**. (3 marks)
- (ii) Explain **four** factors that favour the growth of natural forest in the area marked **L**. (8 marks)
- (c) Explain **four** problems facing forestry in Kenya. (8 marks)
- 8 (a) (i) Name **two** provinces in Canada where wheat is grown on large scale. (2 marks)
- (ii) State **three** physical conditions that favour wheat farming in Canada. (3 marks)
- (b) Compare wheat farming in Kenya and Canada under the following subheadings:
- (i) research; (2 marks)
- (ii) government policy; (2 marks)
- (iii) transport. (2 marks)
- (c) Explain **four** problems that affect wheat farming in Canada. (8 marks)

- (d) Your Geography class intends to carry out a field study on wheat harvesting in a farm.
- (i) State **two** reasons for preparing a working schedule. (2 marks)
 - (ii) Outline **two** problems that face wheat harvesting you are likely to find out. (2 marks)
 - (iii) Suppose during field study you used interview method to collect data, state **two** limitations of the method. (2 marks)

- 9
- (a)
 - (i) Identify the **three** types of inland waterways used for transport in Africa. (3 marks)
 - (ii) Give **four** reasons why the government of Kenya is expanding pipeline transport. (4 marks)
 - (b)
 - (i) State **three** advantages of railway transport. (3 marks)
 - (ii) State **four** conditions of roads in Kenya that may lead to motor vehicle accidents. (4 marks)

- (c) The sketch map below shows the Great Lakes and St. Lawrence seaway. Use it to answer question C.



KEY:

xxxxxx – International Boundary.

Name the:

- (i) ports marked **M** and **P**. (2 marks)
- (ii) Lake marked **N**. (1 mark)

(d) Explain **four** benefits of the Great Lakes and St. Lawrence Seaway to the economies of U.S.A and Canada. (8 marks)

10 (a) (i) Name **two** settlement patterns. (2 marks)

(ii) Explain **four** physical factors that influence settlement. (8 marks)

(b) (i) Explain how the following factors have led to the growth of Thika.

• Location; (2 marks)

• Transport; (2 marks)

• Land. (2 marks)

(ii) Apart from being a transport and communication centre, give **three** other functions of Thika town. (3 marks)

(c) Explain **three** positive effects of urbanization to a country. (6 marks)

