1. (a) Name two elements of weather that can be recorded at a school weather station
   (b) Give three reasons why the recording of data at a school weather station may be inaccurate
2. (a) State two factors which influence the occurrence of surface run-off
   (b) The diagram below shows a waterfall. Name the feature marked X, Y and Z
3. (a) State two causes of submergence of coasts
   (b) Name two features that form as a result of submergence of coasts
4. (a) What is soil?
   (b) The diagram below shows a cross-section of a hillside and soil profiles that develop at different parts of the hillside
Match the soil profiles with the corresponding parts of the hillside where each profile is likely to develop

5. The diagram below shows a glaciated upland area

(a) Name the feature marked P, Q, and R

(b) How is a U-shaped valley formed?

SECTION B

Answer questions 6 and any other two questions from this section

6. Study the map of Mathioya 1: 50,000 provided and answer the following questions

(a) (i) What is the bearing of the cattle dip at grid reference 716386 form the coffee factory at grid reference 740377?
    (ii) Give the approximate height of Kigoini dam
    (iii) Measure the length of the district boundary in the Aberdare forest from Western margin of the map to the eastern edge of the forest (Give your answer in kilometers)

(b) Describe the drainage of the area covered by the map

(c) Draw a sketch section along northing 42 from grid reference 720420 to grid reference 760420
    On the section mark and name
    (i) A road
    (ii) A forest
    (iii) A river

(d) Describe the distribution of settlements in the area covered by the map

(e) (i) Citing evidence from the map, give two reasons why the area covered by the map is suitable for coffee growing

(ii) Apart from agriculture, name two other economic activities carried out in the area covered by the map
7. (a) Differentiate between plutonic rocks and volcanic rocks

(b) Describe how lava plateau is formed

(c) (i) Name three volcanic features found in the rift valley of Kenya
      (ii) Explain four negative effects of vulcanicity in Kenya

(d) You intend to carry out a field study of a volcanic landscape
      (i) State four reasons why it is necessary to conduct a reconnaissance of the
          area of study.
      (ii) During your field work, you intend to study volcanic rocks, state why you
           would need the following items

8. (a) State three characteristics of the inter-tropical convergence zone

(b) With the aid of a labeled diagram, describe how relief rainfall is formed

(c) State five characteristics of the hot desert climate

(d) You are required to carry out a field study to determine the relationship between
    climate and vegetation in your district
      (i) Give three reasons why you would need the map of the district
      (ii) Name two sampling techniques you are likely to use during the field study
      (iii) Give two reasons why sampling would be appropriate for this study
      (iv) State four methods you would use to record data during the field study

9. (a) (i) Describe how Lake Victoria was formed
      (ii) Explain how Lake Victoria has modified the climate of the surrounding

(b) Explain why some lakes in the rift valley have fresh water

(c) State five economic uses of lakes

(d) Explain how each of the following have affected lakes in Kenya
      (i) Deforestation
      (ii) Industrialization
      (iii) Water weeds
1. State four characteristics of softwood forest in Canada.

2. (a) State two human activities that may lead to soil erosion

(b) Give four reasons why it is necessary for Kenya to conserve her environment

3. (a) State three physical conditions that favour sugar cane growing in the lake Victoria basin in Kenya

(b) State three problems experienced in sugar cane farming in Kenya

4. (a) Which are the three functional zones of an ideal urban centre?

(b) What two benefits would there be if more commuters in urban centers in Kenya used public transport?

5. (a) Name two renewable sources of energy which are exploited in Kenya

(b) Give two reasons why the coal resources in Tanzania have not been exploited

SECTION B

Answer question 6 and any other two questions from this section

6. The table below shows items exported from countries A and B. Use it to answer questions (a), (b, and (c)

<table>
<thead>
<tr>
<th>Country A</th>
<th>Weights in Tonnes</th>
<th>Country B</th>
<th>Weight in Tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>12,600</td>
<td>Lubricating oil</td>
<td>2,200</td>
</tr>
<tr>
<td>Coffee</td>
<td>9,990</td>
<td>Industrial chemical</td>
<td>2,100</td>
</tr>
<tr>
<td>Oil cakes</td>
<td>1,560</td>
<td>Fertilizer</td>
<td>5,300</td>
</tr>
<tr>
<td>Spices</td>
<td>750</td>
<td>Vehicles</td>
<td>3,300</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------</td>
<td>Wire products</td>
<td>2,200</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------</td>
<td>Paper</td>
<td>2,700</td>
</tr>
</tbody>
</table>
Total | 24,900  
Total | 17,800

(a) (i) Name the main export item of each country

(ii) Calculate the percentage of the export item with the least tonnage in each country

(b) (i) Draw a divide rectangle 15cm long to represent the export items for country A

Country A
Maize: Coffee: Oilcakes: Spices:

(ii) State three advantages of using divided rectangles to represent geographical data.

(c) How would countries A and B benefit from trading with each other?

(d) State five characteristics of bar graph

7. (a) Describe the stages in the reclamation of land from the sea in the Netherlands

(b) Explain four benefits of land reclamation in the Netherlands

(c) (i) Explain three conditions that favour irrigation farming in Kenya

(ii) State five problems experienced in irrigation farming in Kenya

8. (a) Give four reasons why Kenya should become an industrialized country

(b) Explain why some industries are located near sources of water

(c) (i) State five benefits of decentralizing industries in Kenya

(ii) Explain three problems hindering decentralization of industries in Kenya

(d) State four characteristics of the cottage industry in India

9. (a) (i) Apart from cotton, name two other fibre crops

(ii) State two climatic conditions that are ideal for cotton farming

(b) State three differences between cotton growing in Kenya and U.S.A
Kenya U.S.A

(c) Explain three ways in which the government of Kenya encourages cotton farming

(d) (i) Apart from making textiles, state three other uses of cotton wool
(ii) Explain three problems faced by the textile industry in Kenya