1. a) Give three reasons why it is necessary to study the plate tectonics theory. (3mks)
   b) Name two types of tectonic plate boundaries (2mks)

2. a) The diagram below shows a Six’s Thermometer. Name the parts marked P, Q and R. (3mks)

   ![Six’s Thermometer Diagram]

   b) The table below shows temperature readings at a weather station for one week.

<table>
<thead>
<tr>
<th>Temp/Day</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thur</th>
<th>Fri</th>
<th>Sat</th>
<th>Sun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. °C</td>
<td>28</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>29</td>
<td>29</td>
<td>26</td>
</tr>
<tr>
<td>Min. °C</td>
<td>18</td>
<td>18</td>
<td>20</td>
<td>16</td>
<td>22</td>
<td>21</td>
<td>19</td>
</tr>
</tbody>
</table>

   Calculate the following:
   i) The diurnal range of temperature for Tuesday: (1mk)
   ii) The mean temperature for Saturday. (1mk)

3. a) Give two examples of non-metallic minerals. (2mks)
   b) Why is industrial diamond used in shaping hard stones and metals? (1mk)

4. a) Apart from water vapour, name two other substances that are suspended in the atmosphere. (2mks)
   b) i) Give two factors that are considered when classifying clouds. (2mks)
   ii) Name two types of clouds that give rise to rainfall in the tropical regions. (2mks)

5. a) The diagram below shows an eclipse. Name the features marked V and W. (2mks)

   ![Eclipse Diagram]
b) State four proofs that the shape of the earth is spherical. (4mks)

SECTION B

*Answer question 6 and any other Two questions from this section*

6. a) Study the map of Kericho 1:50,000 provided and answer the following questions.
   i) Give the longitudinal extent of the area covered by the map. (1mk)
   ii) Convert the scale of the map into a statement scale. (2mks)
   iii) What is the approximate height of the hill in the grid squire 6770? (2mks)
   iv) Calculate the area of Kericho Municipality. Give your answer in square kilometers. (2mks)
   b) i) Give three types of natural vegetation found to the west of Easting 53 (3mks)
   ii) What is the bearing of the trigonometrical station at grid reference 554668 from the factory at grid reference 610626? (2mks)
   iii) Identify three forms of land transport found to the north of Northing 68 and west of Easting 53? (3mks)
   c) Describe the distribution of settlements in the area covered by the map. (4mks)
   d) Citing evidence from the map, explain three factors that favour the establishment of tea estates in the area covered by the map. (6mks)

7. a) Differentiate between magma and lava. (2mks)
   b) The diagram below shows some intrusive volcanic features.

   ![Volcanic Features Diagram]

   Name the features marked E, f and G. (3mks)
   c) Describe how the following features are formed and for each give an example from Kenya:
   i) A crater (3mks)
   ii) A geyser (5mks)
   iii) A lava plateau (4mks)
   d) Explain four ways in which volcanic features influence human activities. (8mks)

8. a) i) Name two sources of rivers. (2mks)
ii) The diagram below shows the three stages of the long profile of a river.

Give two features formed by the rivers in each of the three stages. 

b) Describe the processes by which a river transports its load.

c) Describe each of the following drainage patterns:

i) State two methods you would use to collect data.

ii) State three advantages of studying the work of rivers through fieldwork.

9. a) i) Describe how ice is formed on a high mountain.

ii) Apart from a valley glacier, name two types of ice masses found on Mountains in East Africa.

b) Explain how the movement of a valley glacier is influenced by the following factors:

i) Temperature

ii) Width of a glacier channel.

c) Describe the distinctive characteristics of the following features resulting from glacial erosion:

i) A corrie

ii) A pyramidal peak

iii) a fiord (fjord)

d) i) The diagram below shows a glaciated upland area

Name the features marked M, N, and P.

ii) Describe the process through which a crag and tail is formed
10. a) The diagram below shows a breaking sea wave.

i) Name the features marked M, N, and P.

ii) Describe the process through which a crag and tail is formed. 
   (4mks)

b) Describe three processes of wave erosion along the coast.  
   (2mks)

c) Explain how the following factors influence wave deposition:
   i) Gradient of the shore  
      (4mks)
   ii) Depth of the sea  
      (4mks)

e) Using well labeled diagrams, describe how a bay bar is formed.  
   (6mks)
GEOGRAPHY PAPER 2
SECTION A
Answer all the question in this section.
1. State four characteristics of shifting cultivation. (4mks)
2. Give the difference between softwood forests in Kenya and Canada under the following sub-headings.
   a) Distribution of softwood forests (2mks)
   b) Transportation of the logs. (2mks)
3 a) Differentiate between land reclamation and land rehabilitation. (2mks)
   b) State two ways in which each of the following problems experienced at the Mwea irrigation Scheme can be solved;
      i) Low prices of rice (2mks)
      ii) Fluctuating water levels in the irrigation canals. (2mks)
4. Give five reasons why it is necessary to conserve wildlife in Kenya (5mks)
5. a) State two economic benefits of the common Market for Eastern and Southern Africa (COMESA) to the member countries. (2mks)
   b) Give four factors that limit trade among countries of Eastern Africa.

SECTION B
Answer question 6 and any other two questions from this section.
6. The photograph below show cattle rearing in an area in Kenya. Use it to answer question (a)

   a) i) Identify the type of photograph. (1mk)
   ii) Describe the features shown on the photograph. (3mks)
   iii) What three indicators show that the area was experiencing drought when the photograph was taken. (3mks)

   b) Discuss nomadic pastoralist in Kenya under the following sub-headings;
      i) The cattle breeds kept (2mks)
      ii) The pattern of movement (2mks)
      iii) Marketing of the animals. (3mks)

   c) i) give three reasons why nomadic pastoralists keep large herds of animals. (3mks)
      ii) Explain four measures taken by the government of Kenya to improve beef cattle farming (8mks)
7. a)  i) Give two documents from where information on population data is obtained (2mks)
   ii) The pyramid below represents population structure Kenya.

   ![Population Pyramid for Kenya]

   Describe the characteristics of the population as represented by the pyramid. (3mks)

b)  i) In 1989 Kenya population was 21.4 million while in 1999 it was 28.7 million. Calculate the population growth rate over the 10 year period. (Show your calculations) (2mks)
   ii) Explain two factors which may have led to the large population increase between 1989 and 1999. (4mks)

c) Explain three consequences of high population growth rate. (6mks)
d) Explain four physical factors that influence population distribution in East Africa. (8mks)
8. a) The table below shows the quantity of minerals produced in Kenya in tones between years 2001 and 2005. Use it to answer questions (a) (i) and (ii).

<table>
<thead>
<tr>
<th>Mineral/Years</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soda ash</td>
<td>297,789</td>
<td>304,110</td>
<td>352,560</td>
<td>353,835</td>
<td>360,161</td>
</tr>
<tr>
<td>Fluorspar</td>
<td>11,885</td>
<td>85,015</td>
<td>80,201</td>
<td>117,986</td>
<td>26,595</td>
</tr>
<tr>
<td>Salt</td>
<td>5,664</td>
<td>18,848</td>
<td>21,199</td>
<td>31,139</td>
<td>26,595</td>
</tr>
<tr>
<td>Others</td>
<td>6,093</td>
<td>7,000</td>
<td>4,971</td>
<td>6,315</td>
<td>8,972</td>
</tr>
</tbody>
</table>

Source: Economic Survey 2006

i) Calculate the average annual production of soda ash over the 5 year 5 years period. (2mks)

ii) Calculate the total mineral production for the year 2003. (1mk)

b) The diagram below shows shaft mining.

![Diagram of shaft mining](image)

i) Name the parts marked E, F and G. (3mks)

ii) State two problems associated with shaft mining. (2mks)

9. a) State three physical conditions that favour large scale sugarcane farming in Kenya. (10mks)

b) Describe the cultivation of sugarcane farming in Kenya. (10mks)
c) Explain five problems facing sugarcane farming in Kenya. (10 mks)
d) Your class visited a sugar factory for a field study on sugar processing.
i) Outline four stages if sugar processing that the class may have observed. (4mks)
ii) Name two by-products of sugar that the class may have identified during the study. (2mks)

10. Use the map of North-West Atlantic below to answer questions (a) and (b).

**NORTH –WEST ATLANTIC FISHING GROUNDS**

![Map of North-West Atlantic]

a) i) Name the country
ii) Explain how the two ocean currents shown on the map influence fishing in the area shaded on the map other than ocean currents. (6mks)

b) Explain three factors that favour fishing in the area shaded on the map other than ocean currents (6mks)

c) Explain why in East Africa, fresh water fishing water in the area shaded on the map other than ocean currents. (6mks)

d) The diagram below shows a fishing method

![Diagram of fishing method]
i) Describe how the method is used in catching fish.  (5mks)

ii) List three methods used to preserve fish.  (3mks)