# KCSE GEOGRAPHY  MODEL EXAMS

**KCSE PREDICTION 1**
**PAPER 1**

1.  a) Name two forces responsible for the shape of the earth (2mks)
    b) Give three effects of rotation of the earth (3mks)
2.  a) What is a line of latitude (2mks)
    b) state three characteristics of the inter-tropical convergence zone (3mks)
3.  a) Define the term natural vegetation (2mks)
    b) State three characteristics of mountain climates 3mks)
4.  a) State two characteristics of a river in its middle stage (2mks)
    b)Outline three factors that influence the development of drainage patterns
5.  State five factors that influence mass wasting (5mks)

**Answer question 6 and any other two questions**

6.  Study the map of Kijabe (1:50000) provided and answer the following questions
a)  What is the approximate height of the top of Kijabe hill (1mk)
ii)  Measure the length of Nairobi-Navaisha railway line from ladhies grid reference 257987 to the level crossing near Kijabe station grid reference 308984) Give your answer in Kilometers (2mks)
i)  What is the relief feature on the map which may have created problems in the construction  of the railway line (1mk)
b)  Describe the drainage of the area covered by the map (5mks)
c)  Explain 2 ways in which relief has influenced the distribution of settlement in the area covered by the map (4mks)
d)  Citing evidence from the map, state three social services offered in Kijabe area (3mks)
e)  Suppose you were a student in the school at Kinale and you plan to carry out a field of wakagwe forest
i)  State three reasons why it would be necessary to carry out a reconnaissance (3mks)
ii)  Give three reasons why it would be necessary to sample part of the forest for the study (3mks)
iii)  Identify three problems that may be facing the forest (3mks)
7.  a) What is a rock (2mks)
b.  Name two examples of extrusive igneous rocks (2mks)
ii)  Describe three ways in which sedimentary rocks are formed (6mks)
c.  state four factors that influence the change of original rocks to metamorphic rocks (4mks)
d.  you are planning to carry out a field study on the rocks within your school environment
i)  Give three secondary sources of information you would use to prepare for the field study (3mks)
ii)  State four activities you would carry out during the field study (4mks)
iv)  Identify four problems you are likely to face during the study (4mks)
8.  a)i)Name three types of faults (3mks)
    ii) Apart from compressional forces, explain two other process that may cause faulting (4mks)
b.  i) With the aid of a well labelled diagram, describe how a rift valley is formed by compressional forces (6mks)
    ii)  Explain three ways in which faulting may influence drainage (6mks)
c.  Explain three ways in which faulting is of significance to human activities (6mks)
9.  a) What are tides (2mks)
ii)  Give three causes of ocean currents (3mks)
ii)  Name the three ocean currents along the western coast of Africa (3mks)

b.  Differentiate between a perigean and apogean tide (2mks)

ii) State three characteristics of submerged lowland coasts (3mks)

c. With the aid of a labelled diagram, describe the formation of a spit (6mks)

d. State four conditions necessary for the growth of polyps (4mks)

**10.** a) Define the term desert (2mks)

ii) Name three types of deserts according to their nature of their surface (3mks)

b. Explain the following methods of wind erosion processes

   i)   Deflation (2mks)

   ii)   Abrasion (2mks)

c. state three factors influencing wind transportation (3mks)

ii) By use of a well labelled diagrams describe the formation of a rock pedestal (7mks)

d. You are supposed to carry out a field study of a semi- arid area in Kenya

i)  State two ways through which you would prepare yourself of the field study (2mks)

ii)  What information would you collect through observation that would indicate that the area is turning into desert (2mks)

iii)  State two measures you would recommend to put in place to control desertification in the area (2mks

## PAPER 2

### SECTION A

**Answer all the questions in this section.**

1a. Define **wildlife** (2mks)

b). State **three** reasons why wildlife should be conserved (3mks)

2a). Define **mining** (2mks)

b). Give **three** factors that may encourage mining (3mks)

3a). What is **beef farming** (2mks)

b). Outline **three** features of dairy farming in Denmark. (3mks)

4a). Name **two** forest reserves in the Kenya highlands (2mks)

b). State **three** physical factors favouring development of soft wood forest in Canada (3mks)

5a). Give **two** provinces in Canada where wheat is grown (2mks)

b). State **three** problems facing wheat farming in Canada (3mks)

### SECTION B

**Answer question 6 and any other two questions.**

6. The table below shows the number of tourist who visited Kenya from various parts of the world in 2005 and 2006. **Use it to answer question (a) and (b) in 2005 and 2006.**

| Place of Origin | No. of Tourist | |
| --- | --- | --- |
| | **2005** | **2006** |
| Europe | 942,000 | 965,000 |
| Africa | 120,000 | 154,000 |
| Asia | 97,000 | 128,000 |
| North America | 94,000 | 103,000 |
| Australia and Newzealand | 19,000 | 24,000 |
| All other Countries | 29,000 | 41,000 |
| **Total** | **1,301,000** | **1,415,000** |

a(i).Which continent had the highest increase in the number of tourists vising Kenya between 2005 and 2006 (2mks)

(ii). Calculate percentage increase of tourists from Australia and New Zealand between 2005 and 2006
                                                                                    (2mks)
b(i). Draw a divided rectangle 15cm long to represent the number of tourists that visited Kenya in 2006
                                                                                    (10mks)
(ii). State **two** advantages of using divided rectangle to represent a statistical data.         (2mks)
C(i). Give **five** reasons why domestic tourism is being encouraged in Kenya.                     (5mks)
(ii). State **four** human factors favouring tourism in Switzerland.                               (4mks)
7 a(i). Define the term **Fisheries**                                                              (2mks)
ii). Name **two** countries in Southern Africa that are important for marine fish production        (2mks)
b). Explain **four** factors that favour fishing industry in Japan                                 (8mks)
c). Describe purse seining as a method of fishing.                                                 (6mks)
d(i). State **four** problems experienced in the marketing of fish in Kenya                        (4mks)
(ii). State **three** ways in which Kenya government is promoting fishing industry in the country
                                                                                    (3mks)
8a). State **three** physical condition that favour coffee growing in the central highland of Kenya
                                                                                    (3mks)
b). Describe stages involved in coffee production from picking to marketing                        (8mks)
c). Explain **four** problems facing coffee farming in Brazil                                      (8mks)
d). **Your Geography class carried out a field study on a coffee farm**.
(i). State **fou**r methods they used to collect data.                                             (4mks)
(ii). During the field study the class collected data on quantities of coffee produced from the farm in the last five
years. State **two** methods the class may have used to represent the data.              (2mks)
9a) . State **four** physical factors that influenced location of Mwea- Tebere irrigation scheme. (4mks)
b). Explain **two** benefits of Perkerra irrigation scheme to the Kenyan economy.                 (4mks)
c). State **five** problems experienced in irrigation farming in Kenya                            (5mks)
d(i). Describe the stages in reclamation of land from the sea in Netherlands                       (6mks)
(ii). State **three** uses of polder land in Netherlands                                          (3mks)
(iii). Highlight **three** benefits of Zuyder Zee project                                         (3mks)
10a  (i). Define plantation farming.                                                               (2mks)
(ii). Name **two** crops grown in plantations in Kenya highlands East of Rift Valley              (2mks)
(iii). Outline **four** characteristics of plantation farming                                     (4mks)
b. Explain t**hree** benefits of plantation farming in Kenya                                       (6mks)
c). Students from a school in Naivasha carried out a field study on a flower farm near their school.
(i). Give **three** farm activities they may have identified                                      (3mks)
(ii). State **three** reasons why they needed a working schedule                                  (3mks)
d(i). Apart from flowers name **two** other crops grown in horticultural farming                   (2mks)
(ii). State **three** benefits of growing flowers in a green house.                               (3mks)


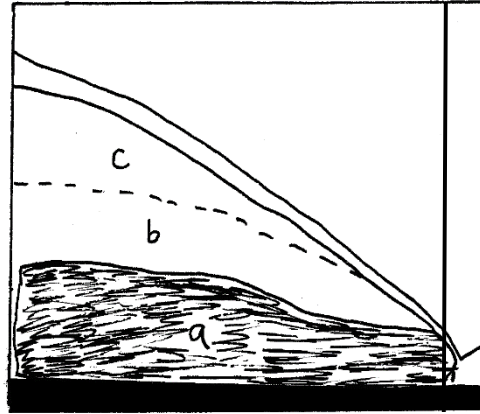**KCSE PREDICTION 2**
**PAPER 1.**
<u>SECTION A</u>
<u>Answer all questions in this section.</u>
1.       a)       Explain the origin of the earth and the solar system according to the Nebula cloud theory.
                                                                                    (4mks)
         b)       Name **two** other theories that explain the origin of the earth and the solar system apart from the
                  Nebula cloud theory.                                                              (2mks)
2.       a)       List **two** zones of transition in the atmosphere.                               (2mks)
         b)       Give **three** evidences that the interior of the earth is hotter.               (3mks)
3.       a)       Define the following terms.
                  i)       River divide                                                             (1mk)
                  ii)      A confluence                                                             (1mk)

iii)    A river profile                                                    (1mk)
b)      List **three** factors that influence the formation of a river.    (3mks)
4.      How is an oasis formed?                                            (4mks)
5.      List **four** characteristics of Mediterranean climate.            (4mks)

**SECTION B:** *Answer questions <u>six</u> and any other <u>two</u> questions.*

6.      (a) Study the map of Kijabe 1: 50,000 sheet 134/3 provided and answer the following questions
            (i) Give the approximate height of peak of Kijabe hill.      (1mk)
(ii) Measure the length of the Naivasha –Nairobi railway line from landhies (Grid ref 257987) to the level crossing near Kijabe station (grid reference 308984). Give your answer in kilometers and Meters.)                                                                   (2mks)
(iii) Name the relief feature on the map that may have created problems during the construction of the railway line.                                                     (1mk)
(b) Describe the drainage of the area covered by the map extract.          (5mks)
(c) Explain how relief has influenced the distribution of settlement in the area covered by the map extract.                                                            (4mk
    (d) Citing evidence from the map, state four economic activities carried out in the area
        covered by the map extract.                                       ( 4 mks)
     (e) Suppose you were to carry out a field study at Wakangwe forest:
            (i) Design a working schedule that you would use during the day of the study. (5mks)
(ii) Give reasons why it would be necessary to sample part of the forest for the study.    (2mks)
(iii) State two ways in which your findings would be useful to the local community.    (2mks)
7.      a)      i)      What is faulting?                                  (1mk)
                ii)     With the use of a well labeled diagram explain how a reverse fault occurs.   (5mks)
                iii)    State **two** other types of faults apart from reverse faults.        (2mks)
        b)      Describe how a rift valley forms through tensional forces.         (4mks)
        c)      Explain **three** ways in which features resulting from faulting are of economic importance
        to man.                                                            (6mks)
        d)      You intend to carry out a field study of the landforms around your school.
                i)      State **two** hypotheses you are likely to formulate for the study.      (2mks)
                ii)     Apart from dividing your class into groups, in what three other ways will you
                        prepare for the study.                             (3mks)
                ii)     In what **two** ways is dividing the class into groups important?    (2mks)
8.      a)      i)      Differentiate between intrazonal and azonal soils.    (2mks)
                ii)     Give **three** examples of a zonal soils            (3mks)
        b)      i)      Explain **four** factors that influence soil formation.    (8mks)
                ii)     Give **two** factors that determine the colour of soil    (2mks)
        c)      i)      What is soil erosion.                               (2mks)
                ii)     Explain **four** ways in which vegetation prevents soil erosion.    (8mks)
9       a)      i)      Name a country in Africa where temperate grassland is found.    (1mk)
                ii)     State **four** characteristics of temperate grasslands.    (4mks)
        b)      i)      Explain **four** ways trees in the coniferous forests have adapted to the
                environmental conditions of the region.                    (8mks)
        c)      You are required to carry a field study on a forest near your school. Describe the methods
                you would use to determine each of the following aspects of the trees in the forest.
                i)      Age of the trees.                                  (3mks)
                ii)     Height of the trees.                               (3mks)
                iii)    Tree species                                       (3mks)
10.     The figure below shows underground zones of saturation.  Use it to answer question a (i)

a)  i)  Identify the zones marked a, b, and c.                                    (3mks)
    ii)  Name **four** sources of groundwater.                                     (4mks)
b)  Explain **four** ways in which groundwater is of significance to human activities.  (8mks)
c)  i)  Give **two** examples of lakes in East Africa that have formed due to crustal
        warping.                                                                  (2mks)
    ii)  Describe how the process of crustal warping leads to formation of lakes.   (5mks)
    iii)  State **three** other processes that lead to formation of lakes apart from crustal
         warping.                                                                 (3mks)

## PAPER 2

**SECTION A (25 marks)** **Answer All the Questions in this Section**

1.  a) Define the term mining.                                              **(2 marks)**
2.  b) State **three** forms in which minerals occur.                       **(3 marks)**
3.  a)  Distinguish between forest and forestry.                            **(2 marks)**
    b)  Show **three** factors that influence the distribution of forests.  **(3 marks)**
4.  a) What is horticulture?                                                **(2 marks**
    b) Give **three** economic factors that influence agricultural activities.  **(3 marks)**
5.  a) Name two places where limestone are found in Kenya.                  **(2 marks)** b) List
    **three** uses of soda ash.                                **(3 marks)**
6.  a) What is a dead ground?                                               **(2 marks)** b)
    Mention **three** uses of a photograph.                                 **(3 marks)**

**SECTION B (75 marks)**
**Answer question 6 and any other two questions**

6.      Study the photograph below and use it to answer question (a).

(a)    (i)    Identify the type of photograph shown above.    **(1 mark)**
           (ii)    Describe the characteristics of the forest shown on the photograph. **(4 marks)**
           (iii)    Draw a rectangle measuring 15 cm by 10 cm. On it, sketch and label **five** main features shown on the photograph.    **(5 marks)**
(b)    (i)    Name **two** indigenous softwood tree species in Kenya.    **(2 marks)**
           (ii)    Explain **three** problems facing forestry in Kenya.    **(6 marks)**
           (iii)    State **three** factors favoring the development of softwood forests in Canada.
                                                                     **(3 marks)**

(c)    Give **four** differences between softwood forests in Kenya and Canada.    **(4 marks)**

7.    Study the table below and answer the questions that follow

| Oil consumption in Kenya in the year 2010 | |
|---|---|
| **Economic sector** | **Percentage of oil consumed** |
| Agriculture | 4 |
| Aviation | 21 |
| Commercial and Industry | 22 |
| Power | 7 |
| Rail | 6 |
| Road | 30 |
| Shipping | 6 |
| Others | 4 |
| **Total** | **100** |

a)    i) Draw a simple pie chart to represent the information above.    **(6 marks)**
b)    ii) What is the percentage of oil used in transport in the year 2010?    **(2 marks)**
    iii) Mention **two** demerits of using the method above to represent data.    **(2 marks)**
c)    i)    List **three** countries where oil is produced in the Middle East.    **(3 marks)**
    ii)    Explain **three** contributions of oil in the economy of the countries in the Middle East
                                                                       **(6 marks)**
    c)    Describe how petroleum oil is formed.    **(6 marks)**
8    a)    Name **two** wheat growing counties in Kenya    **(2 marks)**
    b)    State **five** conditions favoring wheat farming in Kenya.    **(5 marks)**
    c)    Describe wheat farming from planting to harvesting stage.    **(8 marks)**
    d)    Give **two** selling points of wheat in Kenya.    **(2 marks)**
    e)    Compare wheat farming in Kenya and Canada.    **(8 marks)**

9.    a) Discuss nomadic pastoralism in Kenya under the following sub-headings
    i) The cattle breeds kept    **(2 marks)**

    ii) The pattern of movement    **(2 marks)**

    iii) Marketing of the animals    **(3 marks)**
    b)    i) Give **three** reasons why nomadic pastoralists keep large heads of animals.    **(3 marks)**
    ii) Explain **four** measures taken by the government of Kenya to improve beef cattle farming.
                **(8 marks)**
    c) Give **four** challenges facing nomadic pastoralism in Kenya    **(4 marks)**
    d) Name **three** indigenous breeds of dairy cattle reared in Kenya.    **(3 marks)**
10.) a.) i.) Differentiate between land reclamation and land rehabilitation    **(2 marks)**
    ii) Identify three methods of land reclamation in Kenya    **(3 marks)**

b) i.) State four physical factors that influenced the location of Mwea Tabere irrigation scheme

**(4marks)**

ii.)  Explain four problems facing Mwea Tabere irrigation scheme                    **(8 marks)**

c) i.) Outline the stages that were involved in the reclamation of land from the sea in Netherlands

**(5marks)**

ii.) State three benefits of the of irrigation farming in Kenya                    **(3 marks)**

**KCSE PREDICTION 3**
**PAPER 1**
1.      The diagram below shows a six's thermometer.
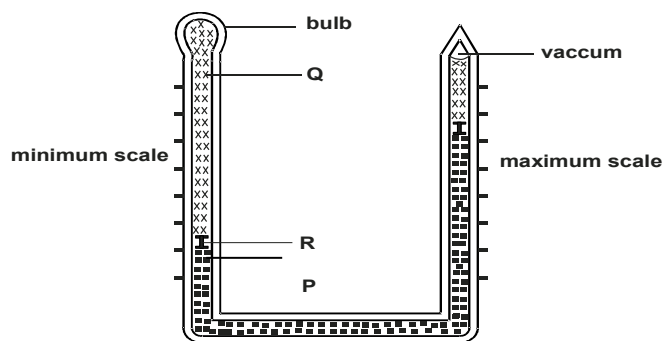


a) Name the parts marked P, Q and R.                                       (3 marks)

b) The table below represents the rainfall and temperatures data of station X.

| Month | J | F | M | A | M | J | J | A | S | O | N | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Temp °C | 28.9 | 29.7 | 30.3 | 29.9 | 29.7 | 29.2 | 28.4 | 28.7 | 29.6 | 30.1 | 29.2 | 28.7 |
| Rainfall mm | 9.0 | 8.0 | 21.0 | 49.0 | 25.0 | 9.0 | 20.0 | 10.0 | 4.0 | 10.0 | 17.0 | 11.0 |

i) What is the annual range of temperature?                              (1 mark)

ii) Calculate the total rainfall of the station.                             (1 mark)

2.   a) What is rock metamorphism?                                     (2 marks)

b) Give three   examples of chemically formed sedimentary rocks.              (3 marks)

3. The diagram below shows erosional features of the waves at the coast.  Use it to answer question
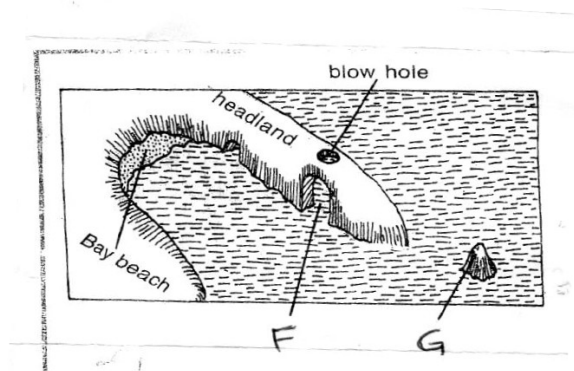
(a) Identify the features marked **F** and **G**.                                    (2 marks)

   (b) Give three submerged upland coasts                                      (3 marks)

4(a) Describe how lava-dammed lake are formed.                            (3 mrks)

(b) State two ways in which lakes influence the climate of the surrounding areas.   (2mrks)

5(a) Distinguish between soil profile and soil catena                          (2 marks)

   (b) Give three soil forming processes.                                (3 mark)

## SECTION B

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

**6.** Study the map of Kijabe 1:50000(sheet 134/3) provided and answer the following questions.

a)      i) State the title of the map                                              (2 marks)

        ii) Convert the ratio scale into statement scale                          (2mks)

        iii) Identify the physical features found on grid source 4293
b)  i) What is the bearing of the cattle dip at Ewaso Kedong valley from grid reference 3193
                                                                        (2 marks)

ii) What is the exact height of Kijabe hill at grid 2699.                  (2 marks)

   iii) Explain three factors that influence settlement in the area covered by the map      (6mks)
   iv) Name two methods used to show relief.                                  (2 marks

c) Describe relief of the area covered by the map                          (5 marks

d) Field study was carried out in Kijabe       .
        i)State two types of vegetation the researchers identified.              (2 marks)

    ii) State two challenges they encountered.                            (2 marks)

7. (a) (i) What is folding?                                              (2 Marks)

(ii) Name three fold mountains formed during Caledonian Orogeny.          (3 Marks)

(b) State four characteristics of folded landscape.                        (4 Marks)

(c) The diagram below shows a type of fold.

(i) Name the type of fold. (1 Mark)
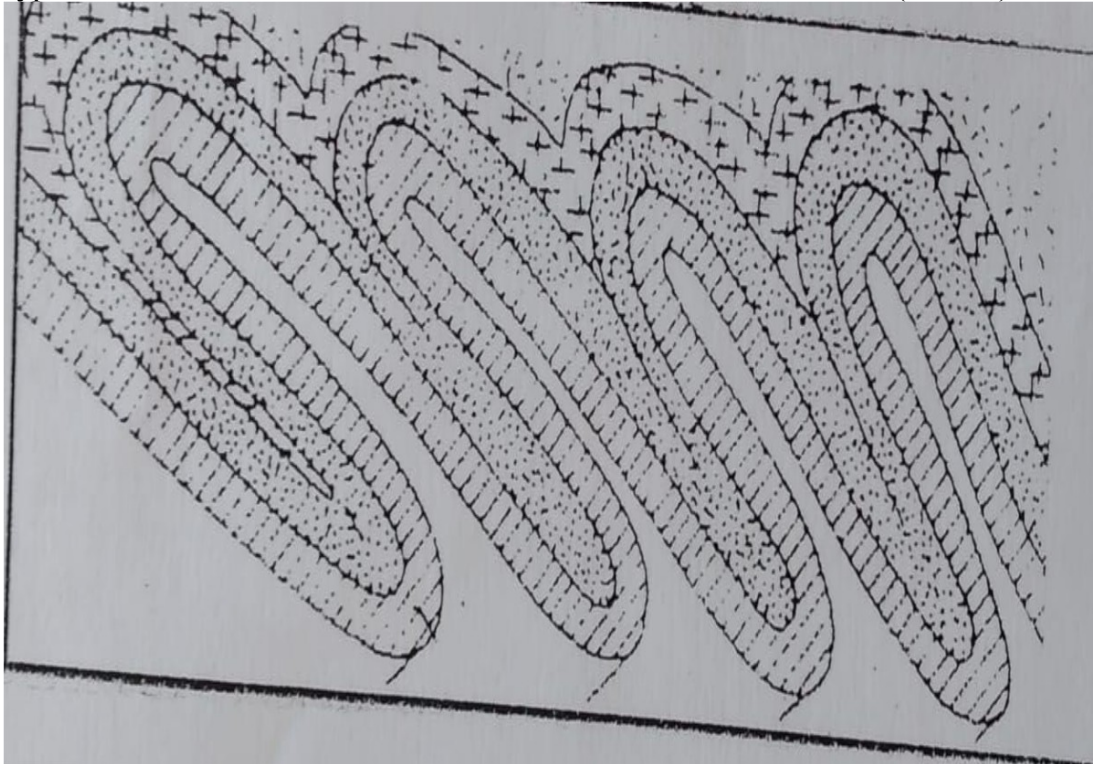


(ii) Describe how the above type of fold is formed. (7 Marks)

(d) Explain four effects of Fold Mountains on human activities. (8 Marks)

8a. Name three types of desert landscapes. (3 marks)

b. Explain three ways through which the wind carries out erosion in the desert. (6 marks)

c. With an aid of a well labeled diagram, describe how a rock pedestal is formed. (6 marks)

d).State two factors which influence transportation of materials by wind in deserts. (2 marks)

e).Explain four ways through which desert influence human activities. (8 marks)

The diagram below represents underground featured in a limestone area. Use it to answer questions
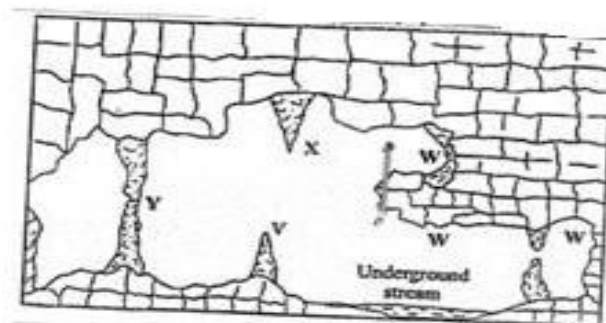


a). i). Name the featured marked X, V and W. (3 mrks)

ii). Describe how the feature marked Y is formed                                    (6 mrks)

b). i). What is an artesian basin?                                                           (2 mrks)

ii). Explain three factors which influence the formation of features in limestone areas (6mrks)

c). You are supposed to carry out a field study of an area eroded by water.

i). Give three reasons why you would need a map of the area of study            (2 mrks)

ii). Name two erosion features you are likely to identify during the field study      (2 mrks)

**10. a**   i) Define the term glaciation.                                                  (2 mrks)

ii) Name three types of glaciers.                                                           (3 mrks)

**b)** Describe how the following features found in upland glaciated landscape are formed.

i) U-shaped valley                                                                          (5 mrks)

ii) Pyramidal peak                                                                          (5 mrks)

**c)** Explain three significances of upland glaciated features to human activities.        (6 mrks)

**d)** Suppose you were to carry out a field study of glaciated lowland.

i) State two advantages of using oral interview to collect information during the field study. (2mrks
ii) Name two features found in glaciated lowland that you are likely to study.              (2 mrks)

**Paper 2**
**SECTION A**
*Answer all the questions in this section*
1
   a)  Name two exotic species  of trees planted  in Kenya           ( 2 mks)
   b)  State three reasons why it is necessary to carry out afforestation programs in Kenya (3 mks)
2
   a)  a) Name two water canals found in Africa.    (2mks)
   b)  b) Give three roles of transport on industry.                  (3mks)
3.
   (a)  State **three** measures which the government of Kenya has taken to reduce infant mortality
   (b)  Give **two** negative effects of lowpopulation growth in a country.            (2 marks)
4
   (a)  Give any two minerals found in the Rhur region of Germany.            (2mks)
   (b)  Identify three main types of industries found in Kenya.                (3mks)
5
   (a)  List two factors influencing trade    ( 2 marks)
   (b)  Identify THREE major imports to Kenya.              (3 marks)

## SECTION B
*Answer question 6 and any other two questions from this section*

6.     6. Study the photograph below and answer the questions that follow.



a     i) Identify the type of photograph above.                               1mk)
       ii) Give two reasons for your answer above.                    (2mks)
       iii) Draw a rectangle measuring 8cm by 6cm. on it, mark and label the main features. (4mks)
b     i) Name two types of coffee grown in Kenya.                    (2mks)
       ii) Name three counties in Western Kenya where coffee is grown.   (3mks)
        iii.)Give three conditions favoring coffee growing in Kenya (3marks)
c     i) State three problems facing coffee farmers in Kenya.                (3mks)
       ii) Identify three ways in which the government has attempted to promote coffee farmers in Kenya.
                                                                   (3mks)
d Explain two reasons why coffee production is more developed in Brazil than in Kenya. (4mks)
7. a) Apart from the sun, name *three* other sources of energy (3Marks)
ii) State *four* advantages of using solar energy (4Marks)
b) Give *four* ways in which Kenya has benefited from hydroelectric power scheme (4Marks)
c) Explain *five* factors favouring development of Hydroelectric power projects (10Marks)
d) Explain *two* impacts of energy crisis in the society. (4Marks)

8a)i.) Define the term land reclamation.                               (2mks)
       ii) State three ways through which land can be rehabilitated in Kenya.(3mks)
       b)  A part from Mwea Tebere, identify any three irrigation schemes in Kenya. (3mks)
       ii) Explain three physical factors that influenced the location of Mwea Tebere irrigation scheme.  (6mks)
       c) Give three problems facing Mwea Tebere irrigation scheme.       (3mks)
       d) Identify two benefits of Zuyder Zee project in Netherlands            (2mks)
       i)        Explain three similarities between land reclamation in Kenya and Netherlands.
                                                                   (6mks)

9. a) Define the term Mining. (2mks)
    ii) List three ways in which minerals occur.(3mks)
    b) Identify any three minerals mined within the rift valley of Kenya. (3mks)
    iiMention any two problems associated with underground mining.(2mks)
    c) Study the diagram below and answer the questions that follow.
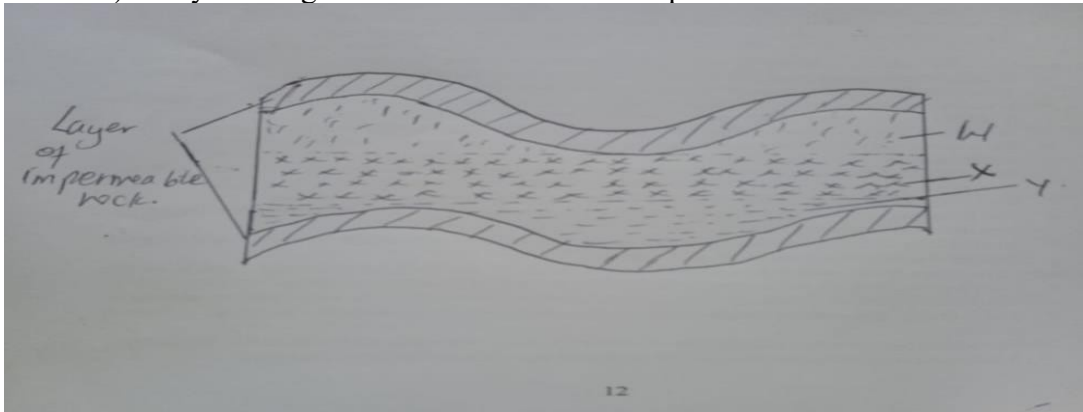


    i)      Name the part labeled WXY                                   (3mks)
    ii)     State three conditions that favor the formation of an oil reservoir. (3mks)
    d) Students carried out a field study in a mining site.
    i) State one objective of the study. (1mk)
    ii) Give two methods they used to collect data. (2mks)
    iii) Identify the features they may have observed to conclude that the land has been derelicted.
                                    (3mks)
    iv)A part from land dereliction, give three other effects of mining on the environment. (3mks)
10. a) Define the term environment. (2mks)
    ii) State three farming methods that assist in soil conservation. (3mks)
    b) State three ways in which people are affected by floods. (3mks)
    ii) Explain three methods in which floods can be controlled. (6mks)
    c) Give two causes of water pollution. (2mks)
    ii) State three effects of water pollution on environment. (3mks)
    iii) Explain any three ways in which drought and desertification can be controlled.(6mks)

**KCSE PREDICTION 4**
**PAPER 1**

1.    a)    Name two branches of geography.                            (2mks)
      b)    Give three reasons why it is important to study geography.  (3mks)
2.    a)    What is solar insolation?                      (2mks)
      b)    Outline three importance of moisture in the atmosphere.   (3mks)
3.    a)    State two effects of the rotation of the earth on its axis.  (2mks)
      b)    The local time at manual $60^0$W is 11.30 am.  What is the time in Nairobi
            $37^0$E?                          (3mks)
4.    a)    What is an ice sheet?                      (2mks)
      b)    State three ways in which ice moves  (3mks)
5.    a)    Name the two types of waves experienced in the coastal area.    (2mks)
      b)    List three coastal features which result from wave deposition.  (3mks)

## SECTION B:

**Answer question 6 and any other two questions.**

6.      Study the map of Kijabe 1 : 50,000 (sheet 134/3) provided and answer the following questions.
    a)      i)      Give the longitudinal extent of the area covered by the map.                    (2mks)
            ii)      Identify the two human made features found at grid square 3301              (2mks)
iii) what is the bearing of the cattle dip at Ewaso kedong valley from grid reference 3195( 2mrks
b) i) calculate the area covered by thicket vegetation in the area covered by the map (3mks)
ii) measure the length of all weather road bound surface C68 and give your answer in km. (2 maks)
c) i) Give three evidences showing that the area receives high rainfall (3marks)
ii) Citing evidence from the map, identify three economic activities practiced in the area covered by the map
(6maks)
d)  Describe the drainage of the area covered by the map.                    (5mks)
7.      a)      State two factors which influence the occurrence of underground water      (2mks)
        b)      Differentiate between a well and spring.                                      (2mks)
        c)      The diagram below represent an artesian basin.  Use it to answer question C (i) and (ii) .
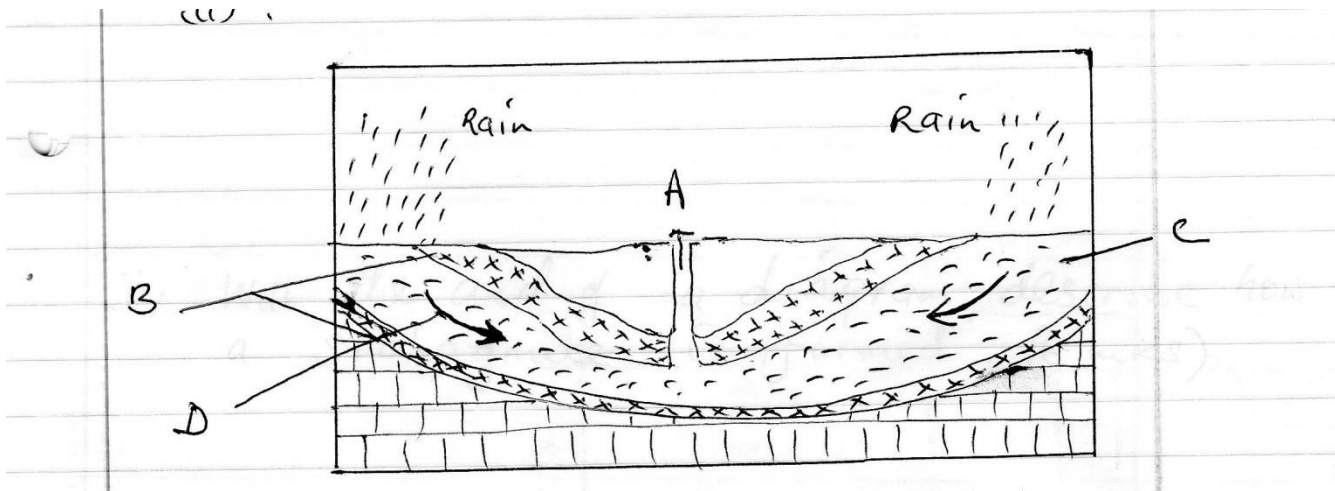


        i)      Name the parts marked A, B, C                              (3mks)
        ii)      Identify the process marked D.                            (1mk)
iii)      State three factors which favour the location of an artesian well                      (3mks)
        d)      i)      Apart from stalagmites name three other underground features formed in limestone areas.
                (3mks)
                ii)      With the aid of a diagram describe how a stalagmite is formed                      (6mks)
        e)      i)      State three reasons why there are few settlements in Karst Landscapes.          (3mks)
                ii)      Name two surface features found in limestone areas.  (2mks)
8.(a) With the aid of well labelled diagrams describe the processes involved in the formation of a corrie lake.
(8mks
(b)  Explain four ways in which a glaciated landscape is of significance to human activities.  (8mks
(c) Explain three conditions that may lead to glacial deposition in lowlands.  (3mks)
(d) Suppose students were to carry out a field study on glaciation on Mt.Kenya
(i)  Name two types of morains they are likely to study.  (2mks)
(ii) State two problems they are likely to experience during the field study.  (2mks)
        (iii) Why was it important for the learners to conduct a pre-visit (2mks)
9.      a)      Describe podzolization as a process of leaching.(4mks)

b) State three ways in which mulching helps in soil conservation.  (3mks)
c) Explain how the following factors influences the formation of soils.
   i) Climate                                                        (4m
   ii) Topography                                                    (4mks
d) i) What is soil catena?                          (2mks)
   ii) Draw a well labelled diagram to show a well – developed soil profile. (3mks)
e) Explain five causes of soil degeneration.                        (5mks)
10. i) Define the term faulting.                                     (2mks)
   ii) Name 2 types of faults.                                       (2mks)
   iii) Use the diagram below to answer the question that follows:-



a) Name the features marked M, N and P                              (3mks)
b) With well labelled diagrams explain the formation of the Rift valley through tensional forces.
   (8mks
c) Explain five positive effects of faulting.                       (10mks)
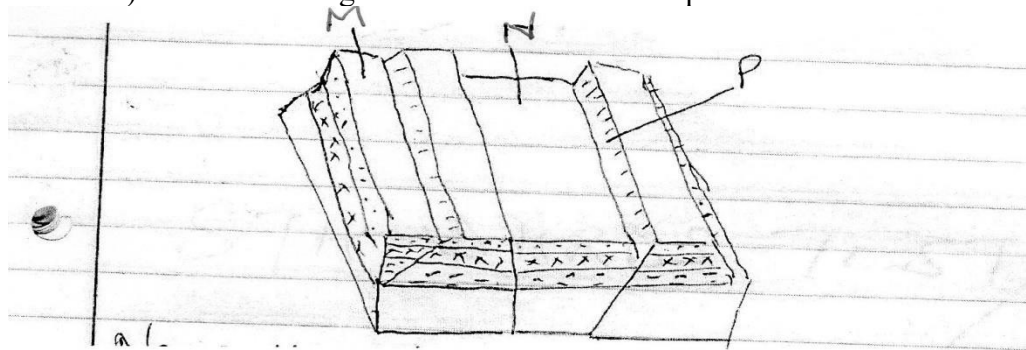
**PAPER 2**
**SECTION A**
**Answer all the questions in this section.**
   1. a) What is Agroforestry?                                       **(2 marks)**
      b) Outline **three** exotic softwood tree species grown in Kenya.  **(3 marks)**
   2. a) Distinguish between Land reclamation and Land rehabilitation.  **(2 marks)**
      b) Identify **three** methods of Land reclamation used in Kenya.   **(3 marks)**
   3. a) What is Eco-tourism.                                        **(2 marks)**
      b) State **three** benefits of Domestic tourism in Kenya.      **(3 marks)**
   4. a) Define the term Trade.                                      **(2 marks)**
      b) Name **three** major imports of Kenya from the Middle East.  **(3 marks)**
   5. a) Apart from road transport, give **two** other forms of Land transport.  **(2 marks)**
      b) State **three** advantages of road transport.              **(3 marks)**
**SECTION B**

**6.** (a) The photograph below shows some mining activities. Study and use it to answer the questions that follow.



    **(i)** Identify the type of photograph.                     **(1 mark)**
    (ii) Give reasons for your answer in (i) above.            **(3marks)**
    **(iii)**Draw a rectangle measuring **10cm** by **12cm** to represent the photograph.   **(1 mark)**
    **(iv)** On it, mark and labe**l four** main features.            **(4marks)**
    **(v)** State **three** negative effects of the mining method shown in the photograph to the physical environment.
                                         **(3marks)**
(b) (i) Name **two** gold mining areas in South Africa.         **(2marks)**
    **(i)** Describe the process of gold processing.           **(5marks)**
    **(ii)** Explain **three** economic benefits of petroleum to the oil producing countries in the Middle East region.
                                         **(6 marks)**

7. (a) (i) Define pastoral farming.                 **(2 marks)**
      (ii) Name **three** pastoral communities in Kenya.       **(3 marks)**
  (b) (i) Identify **two** exotic beef cattle breeds kept in Kenya.     **(2 marks)**
    (ii) Outline **three** characteristics of nomadic pastoralism.     **(3 marks)**
 (c) (i) Explain **three** factors favouring beef farming in Kenya.     **(6 marks)**
    (ii) State **four** similarities between beef farming in Kenya and Argentina.
                                         **(4 marks)**
 (d) Your class carried a field study on tea processing.
    (i) Outline **3 stages** of tea processing that the class may have observed. **(3 marks)**
    (ii) State **two** methods that the class may have used to present data.   **(2 marks)**
8. (a) The diagram below shows a fishing ground in the pacific ocean.
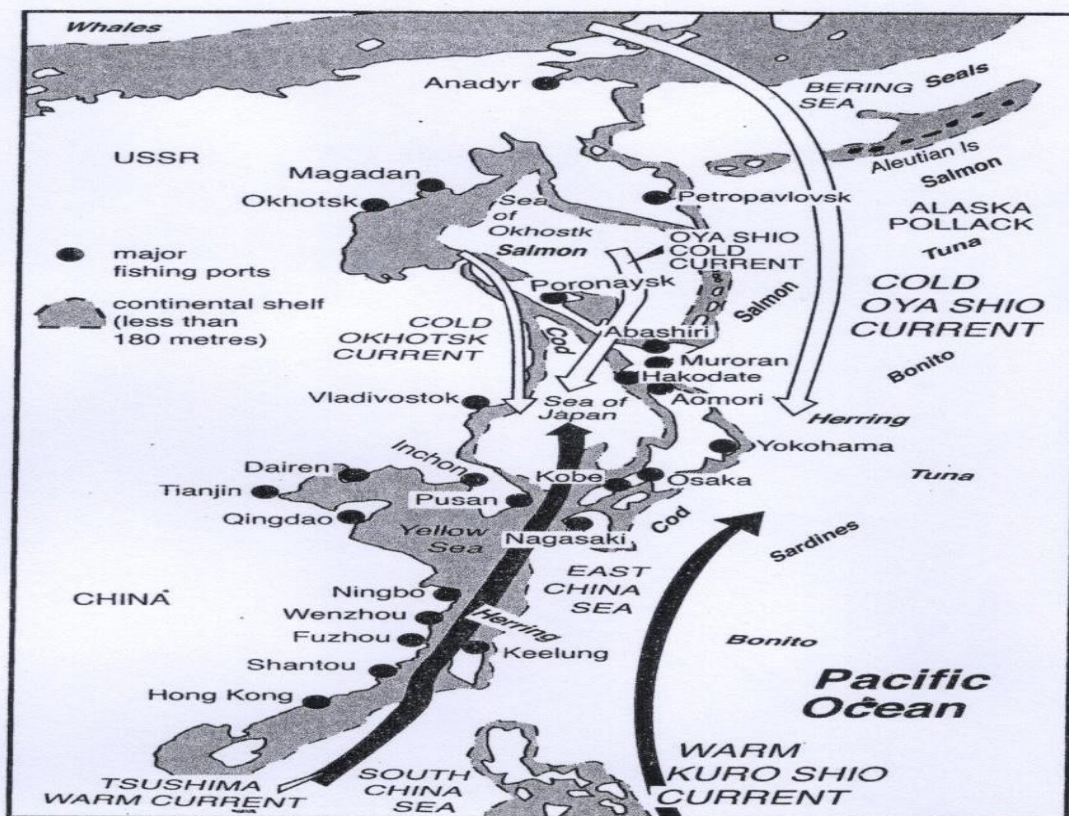
(i)     Identify the fishing ground shown above.                          **(2 marks)**
(ii)     Name **two** types of fish species found in the fishing ground above.     **(2 marks)**
 (b)  (i)  Differentiate between fishing and fisheries.                    **(2 marks)**
      (ii)  Name **two** inland types of fisheries in Kenya.              **(2 marks)**
 (c) (i)   Describe the long lining fishing method.                       **(4 marks)**
      (ii)  Explain **three** physical factors that have influenced the development of fishing in
      Japan.                                                              **(6 marks)**
 (d) (i) State **four** problems that face Marine fishing in Kenya.       **(4 marks)**
 (ii) Give **three** ways of conserving fresh water fisheries in Kenya.   **(3 marks)**
**9.** (a) (i) Define the term energy.                                    **(2 marks)**
      (ii) Name **two** types of renewable energy.                       **(2 marks)**
(b) Study the diagram of the seven forks dam power project provided below and use it to answer the questions
that follow.
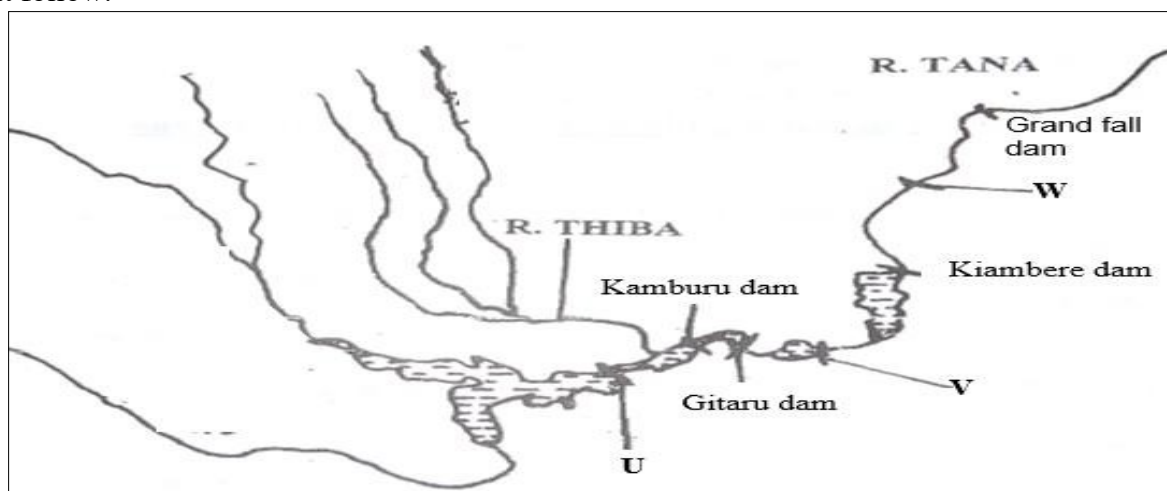
(i) Identify the dams labeled U and V. **(2 marks)**

(ii) Explain **three** physical factors that favored the establishment of the seven forks   power  project.

**(6 marks)**

(iii) State **three** benefits of the seven forks power scheme. **(3 marks)**

(c) (i) What is energy crisis? **(2 marks)**

(ii) Explain **four** effects of the energy crisis to the economies. **(8 marks)**

10.   (a)  (i)  Define industrial decentralization. **(2 marks)**

(ii)  State **three** causes of industrial inertia. **(3 marks)**

(b)   Name **three** non-agricultural industries in Kenya. **(3 marks)**

(c)   Explain **four** measures the government of Kenya is undertaking to promote Jua kali industry in Kenya. **(8 marks)**

(d)   Study the map of Ruhr region below and use it to answer question **(a)**.
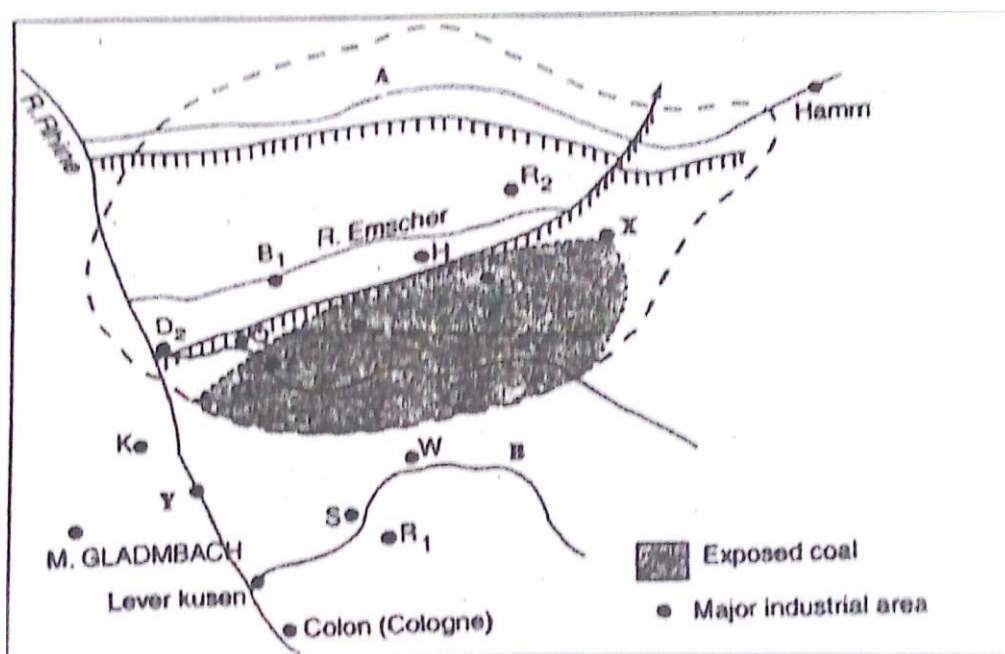


(i)   Identify

- the river marked A. **(1 mark)**
- the canal marked H. **(1 mark)**
- the town marked Y. **(1 mark)**

(ii)  Explain **three** human factors that led to the growth of Ruhr industrial region.
**(6 marks)**

**KCSE PREDICTION 5**
**PAPER 1.**
**SECTION A**
<u>**Answer all questions in this section.**</u>
1.  a)  Explain the origin of the earth and the solar system according to the Nebula cloud theory.
                                                                                (4mks)
    b)  Name **two** other theories that explain the origin of the earth and the solar system apart from the
        Nebula cloud theory.                                        (2mks)
2.  a)  List **two** zones of transition in the atmosphere.                    (2mks)
    b)  Give **three** evidences that the interior of the earth is hotter.      (3mks)

3.  a)  Define the following terms.
        i)      River divide                                           (1mk)
        ii)     A confluence                                           (1mk)
        iii)    A river profile                                        (1mk)
    b)  List **three** factors that influence the formation of a river.        (3mks)
4.  How is an oasis formed?                                                  (4mks)
5.  List **four** characteristics of Mediterranean climate.                   (4mks)

**SECTION B:** *Answer questions <u>six</u> and any other <u>two</u> questions.*
6.  (a) Study the map of Kijabe 1: 50,000 sheet 134/3 provided and answer the following questions

    (i) Give the approximate height of peak of Kijabe hill.                      (1mk)
    (ii) Measure the length of the Naivasha –Nairobi railway line from landhies (Grid ref 257987) to
    the level crossing near Kijabe station (grid reference 308984). Give your answer in kilometers and
    Meters.)                                                                    (2mks)
    (iii) Name the relief feature on the map that may have created problems during the construction of
    the railway line.                                                           (1mk)

    (b) Describe the drainage of the area covered by the map extract.           (5mks)

    (c) Explain how relief has influenced the distribution of settlement in the area covered by the
            map extract.                                                        (4mks)

    (d) Citing evidence from the map, state four economic activities carried out in the area

        covered by the map extract.                                           ( 4 mks)

    (e) Suppose you were to carry out a field study at Wakangwe forest:

    (i) Design a working schedule that you would use during the day of the study.    (5mks)
    (ii) Give reasons why it would be necessary to sample part of the forest for the study.    (2mks)
    (iii) State two ways in which your findings would be useful to the local community.    (2mks)

7.  a)  i)      What is faulting?                                            (1mk)
        ii)     With the use of a well labeled diagram explain how a reverse fault occurs.   (5mks)
        iii)    State **two** other types of faults apart from reverse faults.  (2mks)
    b)  Describe how a rift valley forms through tensional forces.             (4mks)
    c)  Explain **three** ways in which features resulting from faulting are of economic importance
    to man.                                                                    (6mks)

d) You intend to carry out a field study of the landforms around your school.
   i) State **two** hypotheses you are likely to formulate for the study. (2mks)
   ii) Apart from dividing your class into groups, in what three other ways will you prepare for the study. (3mks)

   ii) In what **two** ways is dividing the class into groups important? (2mks)

8. a) i) Differentiate between intrazonal and azonal soils. (2mks)
      ii) Give **three** examples of a zonal soils (3mks)
   b) i) Explain **four** factors that influence soil formation. (8mks)
      ii) Give **two** factors that determine the colour of soil (2mks)
   c) i) What is soil erosion. (2mks)
      ii) Explain **four** ways in which vegetation prevents soil erosion. (8mks)

9 a) i) Name a country in Africa where temperate grassland is found. (1mk)
     ii) State **four** characteristics of temperate grasslands. (4mks)
  b) i) Explain **four** ways trees in the coniferous forests have adapted to the environmental conditions of the region. (8mks)
  c) You are required to carry a field study on a forest near your school. Describe the methods you would use to determine each of the following aspects of the trees in the forest.
     i) Age of the trees. (3mks)
     ii) Height of the trees. (3mks)

     iii) Tree species (3mks)

10. The figure below shows underground zones of saturation. Use it to answer question a (i)



   a) i) Identify the zones marked a, b, and c. (3mks)
      ii) Name **four** sources of groundwater. (4mks)
   b) Explain **four** ways in which groundwater is of significance to human activities. (8mks)

   c) i) Give **two** examples of lakes in East Africa that have formed due to crustal warping. (2mks)
      ii) Describe how the process of crustal warping leads to formation of lakes. (5mks)
      iii) State **three** other processes that lead to formation of lakes apart from crustal warping. (3mks)

**PAPER 2**

<u>SECTION A</u>

1. a) What is human geography? (2mks)
   b) State three ways in which the study of geography contributes to the economic
   development of Kenya (3mks)
2. a) Name the minerals mined in the following regions:
   - Kerio Valley (1mk)
   - Kariandusi (1mk)
   - Lake Magadi (1mk)
   b) Give two ways in which minerals occur (2mks)
3. a) List two physical factors that influence agriculture (2mks)
   b) State three benefits of plantation farming (3mks)
4. a) Define settlement pattern (2mks)
   b) State three characteristics of Central Business District (3mks)
5. State five factors which favour development of car and electronics industry in
   Japan (5mks)

<u>SECTION B:</u> **Answer Q6 and any other two questions from this section.**

6. The table below shows the value of some of Kenya's mineral exports from 215 to 2018. Use it to answer
   questions (a) and (b).

| Mineral \ Year | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|
| Soda ash | 13200 | 8300 | 7300 | 12400 |
| Petroleum products | 4200 | 4500 | 4700 | 6100 |
| Cement | 7300 | 7800 | 7400 | 8900 |

   a) i) Using a scale of l cm to represent l000 million Kenya Shillings, draw a
      comparative bar graph to represent the data shown. (8mks)
      ii) State three advantages of using comparative bar graphs to represent
      statistical data. (3mks)
   b)    Calculate the percentage increase in value of exports between the years 2017
      and 2018. (6mks)
   c)    Explain the significance of trade to the economy of Kenya. (8mks)
7. a) i)  Name three beef farming areas in Argentina (3mks)
      ii)  List three beef cattle breeds reared in Argentina (3mks)
   b)    State five factors which favour beef farming in Argentina (5mks)
   c)    Explain four benefits of beef farming to the economy of Argentina (8mks)
   d)    Outline three differences between beef farming in Kenya and Argentina (6mks)
8. a)     Differentiate between a national park and a game reserve (2mks)
   b) i)  State four reasons for establishing national parks in Kenya (4mks)
      ii) Identify five examples of game sanctuaries in Kenya (5mks)
   c) i)  Define domestic tourism (2mks)

ii) State four factors that hinder domestic tourism in Kenya (4mks)

d) Explain four factors that make Switzerland receive more tourists than Kenya(8mks)

9. a) Differentiate between forests and forestry (2mks)

b) Explain four factors influencing distribution of natural forests in Kenya (8mks)

c) i) Identify three uses of forest product (3mks)

ii) Give four characteristics of coniferous forests (4mks)

d) Explain factors that have led to the decline of the area under forest cover in Kenya (8mks)

10. a) i) List three traditional methods in Kenya (3mks)

ii) Give three benefits of fish farming in Kenya (3mks)

b) Describe drifting as a method of fishing (5mks)

c) Explain four reasons why marine fishing in Kenya is less developed (8mks)

d) You intend to carry out field study on fishing a long Usenge beach on L.Victoria .

i) State three preparations you would make for the study (3mks)

ii) List three activities you are likely to carry out during the study (3mks)

## KCSE PREDICTION 6
## PAPER 1
## SECTION A:
## Answer all questions in this section

1. a) What is a natural satellite? (2mks)

b) State three effects of the spinning of the earth on its own axis . (3mks)

2. Explain three ways through which sedimentary rocks are formed. (6mks)

3. a) Define ocean water salinity. (1mk)

b) State three sources of ocean water salt. (3mks)

4. a) Explain sandblast action of wind erosion. (2mks)

b) State three negative effects of desert features on human activities. (3mks)

5. (a) Name the types of earth movements that occur within the earth's crust. (2marks)

(b) Describe the origin of continents according to the theory of continental drift. (3marks)

## SECTION B: Answer question 6 and any other two from this section

6. Study the Map of Kijabe 1:50,000 (sheet 134/3) Provided and answer the following questions

(a) i) Calculate the latitudinal extend of the area covered by the map (2mks)

ii) Identify two human-made features found in the grid square 3501 (2mks)

iii) Measure the distance of the railway line from Nairobi to where it crosses dry weather  road (3395) give your answer in Kilometres. (2mks)

(b) Draw a rectangle measuring 8cm by 6cm representing the area enclosed by easting 3 and 38 and Northing 90 and 96. (1mk)

On the rectangle mark and label
- Railway line (1mk)
- Dry weather road (1mk)
- River upper Ewaso Kedong (1mk)
- Thicket vegetation. (1mk)

ii) Give the scale of the area you have  drawn . (2mks)

(c) Describe how relief has influenced vegetation distribution in the area covered by the map. (6mks)

(d) Citing evidence from the map give three social services offered in the area covered by the map. (6mks)

7. a) The diagram below shows the angles of the sun's rays at different latitudes when the sun is at the equator. Use it to answer question (a) and (b)
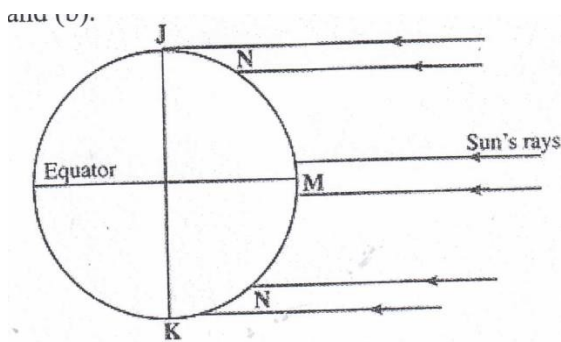
i)   Name the parts of the earth's surface marked J and K.                          (2mks)
ii)  Give two reasons why the intensity of the insolation is higher at M than at N.     (2mks)
b) Explain how the following factors influence weather.
i)   Cloud cover                                                                  (3mks)
ii)  Local winds                                                                  (3mks)
c) Use the map below to answer questions (i) and (ii)
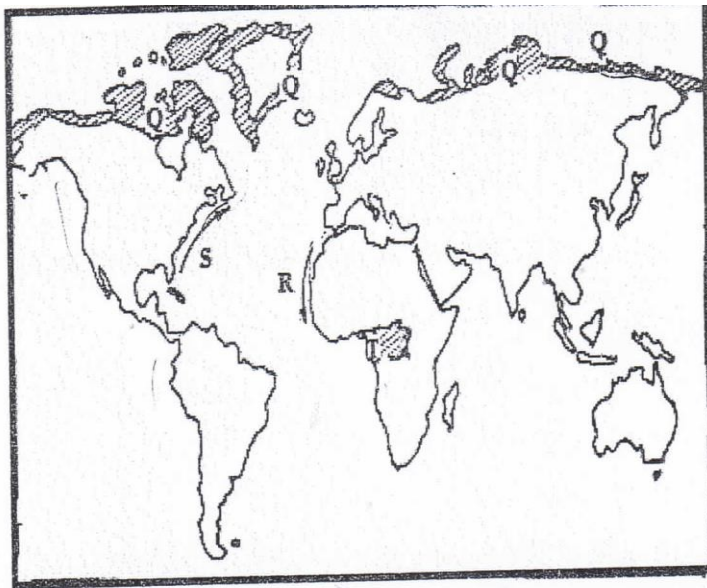


i)   Name :
   • The type of climate found in the shaded area marked Q                         (1mk)
   • The ocean currents marked R and S                                            (2mks)
ii)  Describe the characteristics of the type of climate found in the shaded area marked T.(6mks)
d) Explain how the following factors influence climate
   i) Altitude                                                                    (3mks)
   ii) Distance from the sea.                                                      (3mks)
8 a.i) Name two fold mountains in Africa .                                          (2mks)
   ii) Apart from fold mountains , name four other features resulting from folding.  (4mks)
  b) With the aid of labelled diagram, describe the formation of an over thrust fold.    (5mks)
  c) Explain four effects of fold mountains on human activities.                      (8mks)
d) Students are planning to carry out a filed study on land forms in their District.
i) State four ways in which the students would prepare themselves for the filed study. (4mks)
ii) Give two advantages of studying landforms through field work.                    (2mks)

9. a i) What is soil.                                                             (2mks)

ii) Name two factors that make up soil. (2mks)
b) Explain how the following factors influence the process of soil formation.
i) Parent material (3mks)
ii) Climate (3mks)
iii) Living organisms (3mks)
c.i) Differentiate between soil structure and soil texture (2mks)
ii) Identify two forms of soil floccules . (2mks)
d) State two characteristics of podzolic soils. (2mks)
e. Explain the significance of soils to human activities . (6mks)
10.a i) Distinguish between moraine and .... (2mks)
    ii) Name two areas in the world where ice sheets exist today. (2mks)
    b) The diagram below shows an ................... feature in a glaciated lowland . Use it to answer question
(i) and (ii)
i) Identify the feature in the diagram . (1mk)
ii) Describe how the feature shown is formed . (3mks)
iii) Describe how an outwash plain is formed. (4mks)
c)Explain three ways in which glaciation influences human environment . (6mks)
d) You carried a filed study on glacial erosion on Mt. Kenya
i) Give two erosions highland features you identified . (2mks)
ii) State three challenges you faced during the field study you need a route map. (2mks)

**PAPER 2**
**SECTION A (25 marks) Answer All the Questions in this Section**
7.      a) Define the term mining. **(2 marks)**
8.       b) State **three** forms in which minerals occur. **(3 marks)**
9.      a) Distinguish between forest and forestry. **(2 marks)**
       b) Show **three** factors that influence the distribution of forests. **(3 marks)**
10.    a) What is horticulture? **(2 marks**
     b) Give **three** economic factors that influence agricultural activities. **(3 marks)**
11.    a) Name two places where limestone are found in Kenya. **(2 marks)**
12.    b) List **three** uses of soda ash. **(3 marks)**
13.    a) What is a dead ground? **(2 marks)**
14.     b) Mention **three** uses of a photograph. **(3 marks)**

**SECTION B (75 marks)**
**Answer question 6 and any other two questions**
8.      Study the photograph below and use it to answer question (a).

(c)    (i)    Identify the type of photograph shown above.                                    **(1 mark)**
        (iv)    Describe the characteristics of the forest shown on the photograph. **(4 marks)**
        (v)    Draw a rectangle measuring 15 cm by 10 cm. On it, sketch and label **five** main
               features shown on the photograph.                                      **(5 marks)**
(d)    (i)    Name **two** indigenous softwood tree species in Kenya.              **(2 marks)**
        (iv)    Explain **three** problems facing forestry in Kenya.                **(6 marks)**
        (v)    State **three** factors favoring the development of softwood forests in Canada.**(3 marks)**
(c)    Give **four** differences between softwood forests in Kenya and Canada.        **(4 marks)**
9.        Study the table below and answer the questions that follow

| Oil consumption in Kenya in the year 2010 | |
|---|---|
| **Economic sector** | **Percentage of oil consumed** |
| Agriculture | 4 |
| Aviation | 21 |
| Commercial and Industry | 22 |
| Power | 7 |
| Rail | 6 |
| Road | 30 |
| Shipping | 6 |
| Others | 4 |
| **Total** | **100** |

a)    i) Draw a simple pie chart to represent the information above.                      **(6 marks)**
b)    ii) What is the percentage of oil used in transport in the year 2010?         **(2 marks)**
c)    iii) Mention **two** demerits of using the method above to represent data.          **(2 marks)**
d)    i)    List **three** countries where oil is produced in the Middle East.          **(3 marks)**
e)    ii)    Explain **three** contributions of oil in the economy of the countries in the Middle East
                                                                                      **(6 marks)**
        c)    Describe how petroleum oil is formed.                                    **(6 marks)**
8    a)    Name **two** wheat growing counties in Kenya                              **(2 marks)**
     b)    State **five** conditions favoring wheat farming in Kenya.                 **(5 marks)**
     c)    Describe wheat farming from planting to harvesting stage.                  **(8 marks)**
     d)    Give **two** selling points of wheat in Kenya.                             **(2 marks)**
     e)    Compare wheat farming in Kenya and Canada.                                 **(8 marks)**
9.    a) Discuss nomadic pastoralism in Kenya under the following sub-headings
         i) The cattle breeds kept                                                    **(2 marks)**

         ii) The pattern of movement                                                 **(2 marks)**

         iii) Marketing of the animals                                               **(3 marks)**
     b)    i) Give **three** reasons why nomadic pastoralists keep large heads of animals.     **(3 marks)**
         ii) Explain **four** measures taken by the government of Kenya to improve beef cattle  farming.
**(8 marks)**
     c) Give **four** challenges facing nomadic pastoralism in Kenya                  **(4 marks)**
     d) Name **three** indigenous breeds of dairy cattle reared in Kenya.            **(3 marks)**
10.) a.) i.) Differentiate between land reclamation and land rehabilitation          **(2 marks)**
         ii) Identify three methods of land reclamation in Kenya                     **(3 marks)**
     b) i.) State four physical factors that influenced the location of Mwea Tabere irrigation scheme
                                                                                      **(4marks)**
         ii.)  Explain four problems facing Mwea Tabere irrigation scheme             **(8 marks)**

c) i.) Outline the stages that were involved in the reclamation of land from the sea in Netherlands
**(5marks)**

ii.) State three benefits of the of irrigation farming in Kenya **(3 marks)**

**KCSE PREDICTION 7**
**PAPER 1**
**Section A**
1.  a) State the uniqueness of Geography as compared to other subjects.   (2 marks)
    b) Give three examples of human environment you know.   (3 marks)

2.  The table below shows rainfall and temperature figures for a given station. Study it and answer question (a)

| Months | J | F | M | A | M | J | J | A | S | O | N | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rainfall (mm) | 80 | 120 | 340 | 150 | 130 | 90 | 100 | 120 | 320 | 120 | 100 | 80 |
| Temperature($^O$C) | 28 | 29 | 32 | 31 | 28 | 28 | 29 | 30 | 31 | 30 | 29 | 28 |

a.  Calculate the annual temperature range for the station                    (1mark)
b.  Describe the climate for the station                                        (4marks)
3.      a. The diagram below shows surface features of karst scenery.
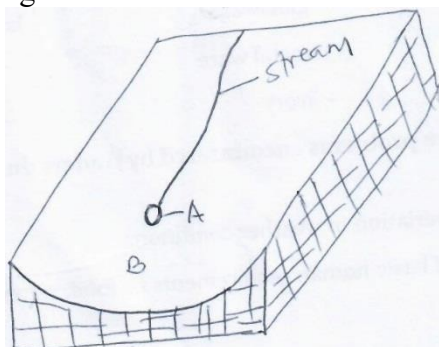


Identify the features marked A and B.      (2 marks)
b. State three conditions necessary for development of karst scenery.   (3 marks)
4.      a) Define an earthquake.      (2 marks)
    b) State three physical causes of earthquakes.     (3 marks)
5.      a) Distinguish between aridity and desertification.    (2 marks)
    b) State any three solutions to the problem of aridity.    (3 marks)
**Section B:** Answer question **6** and any other **two** questions in this section.
*Answer question **6** and any **two** questions*

6.      Study the map of KIJABE 1:50,000 (Sheet 134/3) provided and answer the following questions.
    **a.  Use of marginal information.**
    i) Give the representative fraction scale of the map.                     (1 marks)
    ii) Identify the vertical interval of the map.                            (1 mark)
    iii) What type of road is D398.                                          (1 mark)
    iv) What is the six-figure grid reference for Mai Mahiu school.               (2marks)

    **b.** Measure the distance of the railway line from the level crossing near Kijabe post office to Kijabe station                                                            (2marks)

**c.** Describe vegetation of the area covered by the map. (2 marks)
**d.** Draw a rectangle measuring 10 x 6 cm to represent the area bounded by eastings 30 and
40 and northing 94 and 00. (2 mark)
    i) On it show; Thicket vegetation, railway line and quarry. (3 marks)
    ii) Calculate the new scale of the area you've drawn in (b) above. (2 marks)
    e. With evidence identify **three** social services offered in the area. (6 marks)
  f. Name any three artificial drainage features found in the area. (3 marks)
    a. i. Distinguish between glacial till and fluvio-glacial till. (2 marks)
7.     ii. Give two reasons why there are no ice sheets in Kenya (2 marks)
b. Explain three factors that influence the movement of ice from the place of accumulation.
(6 marks)
  c. Describe how the following glacial erosional features are formed.

    i) Arete is formed (4 marks)

    ii) Glacial trough (4 marks)
  d. You carried out a field work on glaciated lowlands.

    i) Mention two methods of data collection you used. (2 marks)

    ii) Name three glacial depositional features you identified. (3 marks)

    iii) Give two follow up activities that you carried out. (2 marks)

8.     a. Differentiate between folding and faulting (2 marks)
9.     b. i. Apart from rift valley, name three features resulting from faulting (2 marks)
10.     ii. Using well labeled diagrams, describe the formation of the rift valley by tensional forces. (8 marks)
c. i) The diagram below shows a fold. Name the parts marked P, Q and R. (3 marks)
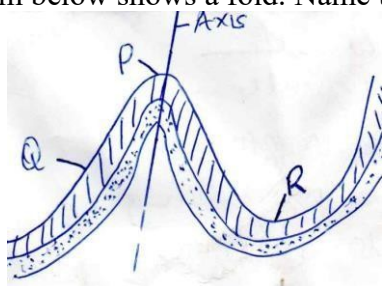


  ii) Name the fold mountains found in; (4 marks)
    North west Africa
    South America
    Western North America
    Asia
d. State and explain any three effects of fold mountains on the climate of a place. (6 marks)

  9. a) (i) State three wind erosion processes (3 marks)
    (ii) Give three factors leading to development of deserts. (3 marks)
b) Explain two ways through which wind transports materials in the deserts (4 marks)
c) Describe formation of:-
    (i) Wadi (3 marks)
    (ii) Seif dune (3 marks)
    (iii) Rock pedestal (3 marks)
  d) Explain three negative effects of desert land forms (6 marks)
  10. a. i. Give three determinants of soil colour (3 marks)

11. ii. State <u>four</u> ways in which humus improve the quality of the soil  (4 marks)
12. iii. Name <u>two</u> types of soil according to structure.
13. (2 marks)

b. Explain how the following factors influence formation of soil                    (4 marks)
   - Living organisms
   - Topography

   c.    Explain <u>four</u> causes of soil degeneration                           (4 marks)
   d.    You intend to carry out a field study on soil erosion around your school.

i. Give <u>two</u> methods of data recording you will use                          (2 marks)

ii. Identify <u>two</u> causes of soil erosion you are likely to come across.      (2 marks)

**PAPER 2**
**SECTION A (25 MARKS)**

**ANSWER ALL THE QUESTIONS IN THIS SECTION**

1.a). Define the term energy crisis                                               (2mks)
      b) State **three** limitations of using solar energy                        (3mks)
2.    a) Give **two** problems facing river transport in African.                 (2 marks)
      (b) The diagram below shows the Great Lakes and the St. Lawrence Sea way.
      Use it to answer the questions below.
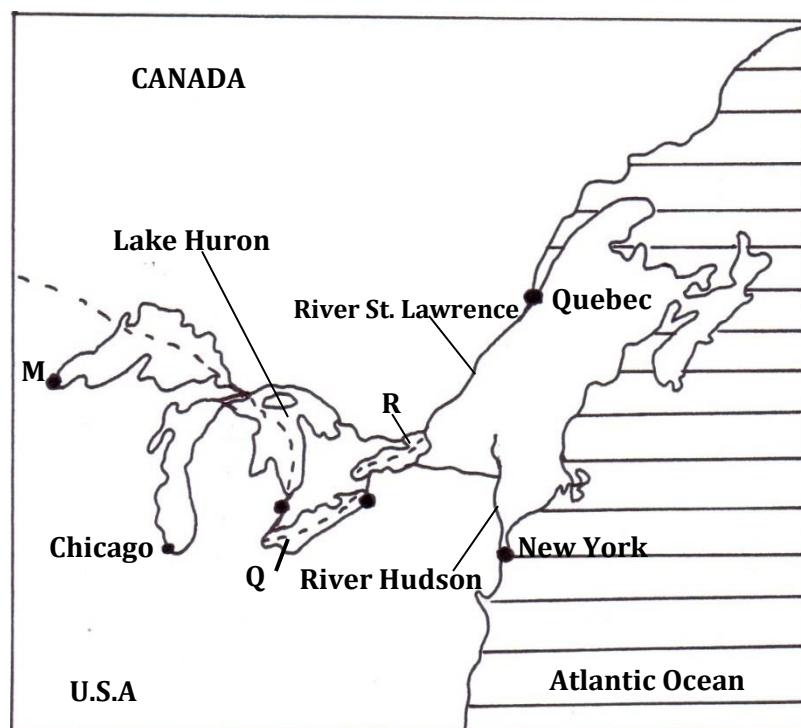


      Name the lakes **M**, **Q** and **R**.                                      (3mks)
3.    a) Apart from tropical hardwood forests name two other types of natural forests          (2mks)

b) State **three** problems experienced in exploitation of tropical hardwood forests (3mks)
4.  a) Give **three** physical factors that favour coffee growing in Kenya highlands (3mks)
    b) State **two** problems facing coffee farming in Kenya (2mks)
5.  a) Give **three** types of fish (3mks)
    b) List **two** traditional methods of fishing (2mks)

## SECTION B
### Answer question 6 and any other two questions from this section

6.  The table below shows crops production in Kenya for a period of five years in 1000 kilograms. Use it to answer question (a)

| CROP/YEAR | 2005 | 2006 | 2007 | 2008 | 2009 |
|-----------|------|------|------|------|------|
| Coffee    | 1000 | 900  | 800  | 700  | 800  |
| Tea       | 700  | 700  | 600  | 680  | 600  |
| Cotton    | 500  | 400  | 300  | 600  | 350  |
| Pyrethrum | 300  | 200  | 300  | 440  | 450  |

(a) (i) Using a scale of 1 cm represent 200 kilograms present the above data using a compound bar graph. (9 marks)
    (ii) List **two** advantages of using a compound bar graph to represent statistical data. (2mks)
(b)(i)Other than Ghana, name other two countries West Africa where cocoa is grown (2mks)
(ii) State **three** physical conditions that favor the growth of cocoa in Ghana. (3mks)
(c) Describe how cocoa is processed in Ghana (6mks)
(d)Give **three** importance of cocoa production to the economy of Ghana.(3mks)

7 . Study the photograph shown below and use it to answer the following questions.



a) i) Identify the type of the photograph shown above. (1mks)
ii) Identify **two** characteristic of the photograph shown above. (2mks)
iii) Give **three** parts of a photograph. (3mks)
b) Name the type of mining method shown above. (1mks)
c) Explain how the method named above (b) is carried out. (6mks)
d) Explain **four** negative effects of the above method of mining on the environment.(8mks)
e) Draw a sketch diagram to represent the photograph shown above. (4mks)
8.  a)  (i)  Define the term land rehabilitation (2 marks)
    ii) Apart from irrigation, name **three** other methods of land reclamation in Kenya. (3 marks)

b)      Explain *three* problems facing irrigation farming in Kenya. (6 marks)
c)      Describe the stages of polderization in the Netherlands      (5 marks)
        d) You intend to carry out a field study on irrigation farming in Mwea Tebere irrigation scheme
            i)Identify the **two** types of hypothesis you would develop for the study      (2mks)
            ii) Name **five** crops grown in the scheme that you are likely to identify      (5mks)
            iii) Give **two** reasons why you need to sample the area of study  (2mks)
9.  (a) i) Define the term industrial inertia      (2mks)
 ii) **Give three** causes of industrial inertia      (3mks
b) Name **three** agricultural non-food processing industries in Kenya (3mks)
c) i) What is cottage industry      (2mks)
ii) List **four** ways in which Jua Kali industries is important to the Kenyan econom(4mks)
d)  i) **State three** problems facing cottage industry in India (3mks)
   ii)  Explain **four** factors that led to the development of iron and steel industry in the Ruhr region of Germany
            (8mks)
10. a) i)What is environmental management      (2mks)
        ii) Give **four** reasons why it is necessary for Kenya to conserve her environment(4mks)
      b)  Explain **four** measures that can be taken to combat pollution      (8mks)
       c) i) Name **five** types of wastes found in urban areas      (5mks)
       ii) Explain three ways in which wastes in urban centres can be managed(6mks)
**KCSE PREDICTION 8**
**PAPER 1**
**SECTION A: COMPULSORY**
*Answer ALL Questions.*
   1.     (a) What is dew point?      (**1mark**)
          (b) Describe how convectional rainfall is formed      (**4marks**)
   2.     (a)The diagram below shows a barchan.



          K
          L
       L
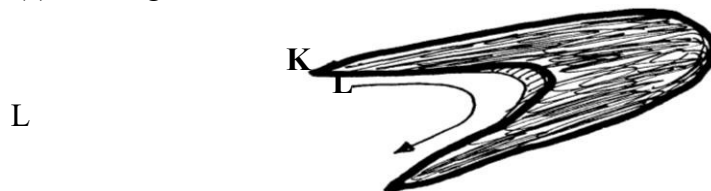
                      K
       i)        Name the air current marked L      (**1mark**)
     ii) Name the part labeled K      (**1mark**)
        (b) How is an Oasis formed?      (**3marks**
   3.   The diagram below shows a glaciated upland area. Study it and answer the questions that follow.



                              R
                                        T

       S
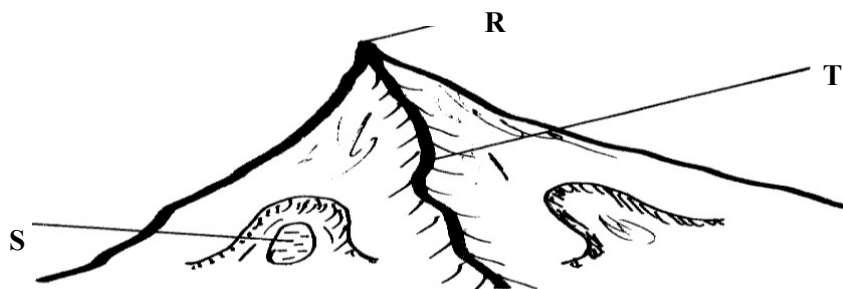
     (a)  Name the features marked R, S and T      (**3marks**)
    4.  Describe two distinct features of a fiord      (**2marks**)

5. Use the diagram below to answer question 5 (a) and (b)
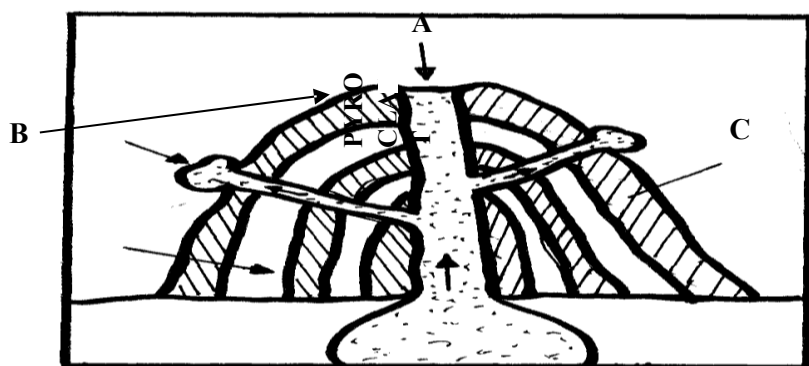


(a) Label the parts marked A, B and C **(3marks)**
(b) Identify two characteristics of the feature drawn above **(2marks**

## SECTION B:
### *Answer question 6 and any other two questions from this section.*

1. Study the map of Busia 1: 50,000 (sheet 101/1) provided and answer the following questions.
   a) i) Name two types of vegetation found in the area covered by the map **(2marks)**
   ii) What is the six – figure grid reference Nambobote School? **(1mark)**
   b) i) Identify two types of scales used to draw the map. **(2marks)**
   ii) Calculate the area of the land to the west of the international boundary in the N.Western corner of the map (Give your answer in square kilometers) **(2marks**
   iii) Measure the distance of the weathered surface road C 523 from grid reference 200299 and grid reference 276317 ( give your answer in kilometers) **(2marks)**
   c) Explain three factors which influenced the distribution of settlements in the area covered by themap. **(6marks)**
   d) Describe the drainage of the area covered by the map. **(4marks)**
   e) Citing evidence from the map explain three factors that favour business in Busia area. **(6marks)**

2. a) i) Name two types of desert landscape **(2marks)**
3. ii) State three physical factors contributing to the development of deserts **(3marks)**
   b) With the aid of a well labelled diagram describe the formation of the following features
   i) Rock pedestal **(3marks)**
   ii)Barchan **(3marks)**
   c) Suppose you are to conduct a field study on the features formed by water action in the desert.
   i) List any three land forms you are likely to study **(3marks)**
   ii) Outline two methods you would use to collect information **(2marks)**
   iii) State three reasons why it is important for them to divide themselves into groups **(3marks)**
   d) Explain three significance of desert land forms to man **(6marks)**
4. a) i)Define the term soil **(2marks)**
   ii) Name three components of soil apart from water. **(3marks)**
   b) i) Explain how the following factors influence soil formation.
   • Plant and animals
   • Topography
   • Climate **(6marks)**

ii) State four characteristic of desert soils                                    **(4marks)**

c) Use the diagram of a soil catena below to answer question (c) (i).
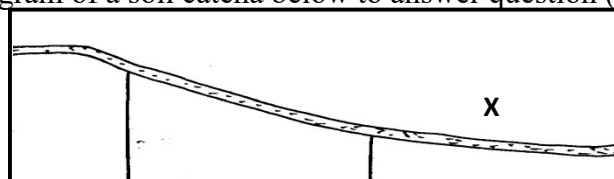


i)  Give a reason why the area marked x is rich for agriculture.               **(1mark)**

ii)  Explain three significance of soils to human activities                   **(6marks)**

d) Form four students intended to carry out afield study of soil in the school vicinity. State the
follow –up activities they would conduct after the study                       **(3marks)**

**5.**  (a)(i) Distinguish between a river divide and interfluves.             **(2marks)**

(ii) The diagram below shows the processes of hydrological cycle. Name the processes marked P,Q,R and S

**(4marks)**
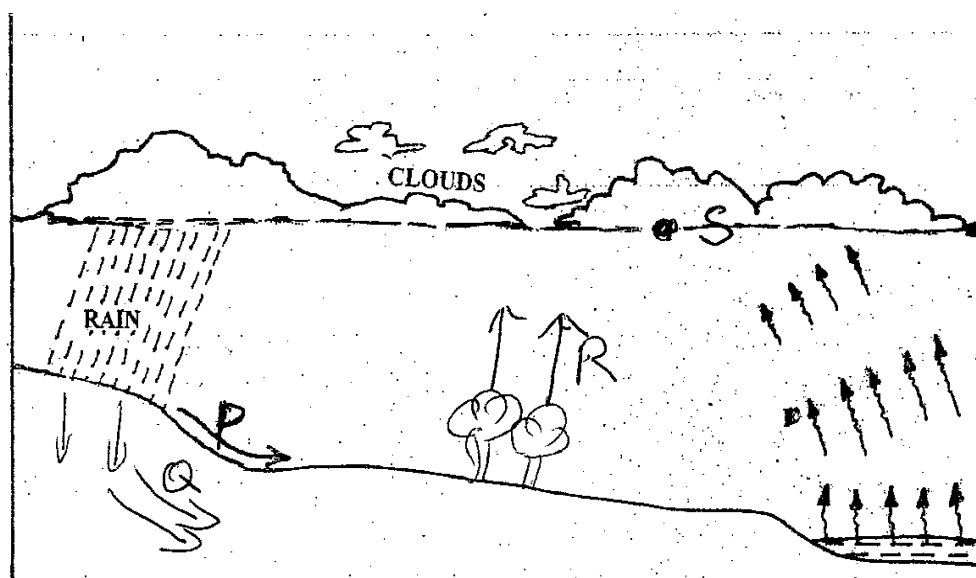


(iii)Explain two significance of the hydrological cycle.                       **(4marks)**

(b) Describe two processes by which a river transports its load.               **(4marks)**

(c) Describe the following drainage patterns:

(i) Superimposed                                                              **(3marks)**

(ii) Dendritic                                                                **(2marks)**

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

(i) Apart from flood plain, name two other features you are likely to identify  **(2marks)**

(ii) State three activities students would engage in during the field study.    (3marks)

(iii)Describe three characteristics of the flood plain they would identify.  (3marks)

**6.**  a) i) Give two examples of human-made lakes in Kenya.                   **(2 Marks)**

ii) A part from human activities, name other three external land forming processes that can lead to the formation
of lakes.                                                                     **(3 Marks)**

b)  Describe how the following lakes are formed.

i) Crate lake. **(4 Marks)**
ii) Moraine dammed lake. **(3 Marks)**
iii) An oasis. **(3 Marks)**
c) i) State two ways in which a lake modifies the climate of the surrounding area. **(2 Marks)**
 ii) Apart from modifying the climate, explain four other benefits of lakes. **(8 Marks)**

## PAPER 2

## SECTION A (25 MARKS)

*Answer all questions in this section in the answer booklet provided*

1. a) List **two** types of minerals **(2marks)**
   (b) State **three** conditions that are necessary for the formation of a petroleum reservoir **(3marks)**
2. a) Give **three** physical conditions that favour coffee growing in Kenyan highlands **(3marks)**
   (b) Give **two** economic problems experienced in coffee growing in Kenya. **(2marks)**
3. (a) State **three** characteristics of Jua –Kali industries in Kenya. **(3marks)**
   (b) State **three** factors that led to the growth of Iron and Steel industry in the Ruhr Region of Germany
   **(3marks)**
4. a) What is Bilateral trade? **(2marks**
   (b) State **two** factors that hinder trade among members of East African Community **(2marks)**
5. a) Name **two** main reclamation projects in the Netherlands. **(2marks)**
   (b)State **three** reasons for reclaiming swamps in Kenya. **(3marks)**

## SECTION B (75MARKS)

*Answer question 6 and any other two questions in the answer booklet provided*

6. The photograph below shows livestock rearing in Kenya. Use it to answer the questions that follow.



a) i) Identify the type of photograph. **(1mark)**
ii) Describe the features shown in the photograph **(4marks)**
b) i) Draw a rectangle measuring 14cm by 10cm to represent the area covered by the photograph
**(1mark)**
ii) On the rectangle, sketch and label four features shown on the photograph **(5marks)**
iii) Using evidence from the photograph, show two indicators which show that the area is dry

**(2marks)**

    c)  i) Name **two** areas in Kenya where the photograph could have been taken
       **(2marks)**
     ii) Explain how the following factors would improve livestock rearing in Kenya:
- Ranching schemes                    **(2marks)**
- Cross breeding                        **(2marks)**
- Destocking the animals                **(2marks)**

    d)  State **four** physical problems facing livestock farmers in Kenya
       **(4marks)**

7.  (a). (i) Name **two** provinces in Canada where wheat is grown on a large scale.   **(2marks)**
  (ii) State **three** physical conditions that favour wheat farming in Canada.   **(3marks)**
    (b) (i) Compare wheat farming in Kenya and Canada under the following sub-headings

      i.    Research                              **(2marks)**
      ii.   government policy                   **(2marks)**
     iii.   transport                          **(2marks)**

c) Explain **four** problems that affect wheat farming in Canada.   **(8marks)**
(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   **(2marks)**

(ii) Outline **two** problems that face wheat harvesting you are likely to find out.   **(2marks)**
(iii) Suppose during the field study you used the interview method to collect data. State two limitations of the method.   **(2marks)**

8.  a) i) Identify **four** types of fishing   **(4marks)**
    ii) Apart from drifting, name **three** other modern methods of fishing.   **(3marks)**
  b)  Describe how drifting method of fishing is carried out.   **(6marks)**
  c)  Explain **four** factors favoring fishing in the North East Atlantic fishing ground.   **(8marks)**
  d)  Give **four** reasons why fish farming is encouraged in Kenya   **(4marks)**

9.  (a)(i) List **three** Jua Kali Industries which are located in rural areas of Kenya.   **(3marks)**
(ii)    Suggest **three** ways in which the Kenya government can promote the development of the Jua Kali Industries.   **(3 marks)**
(b)Explain **three** problems arising from industrialization.   **(6 marks)**
(c) Explain **four** factors which influenced the location of iron and steel industry in the Ruhr region of Germany in the 19th century.   **(8 marks)**
(d) Students of a school in Mombasa County went for a field study at the oil refinery in Mombasa.
(i) List **two** methods that they used to record data.   **(2 marks)**
(ii) Give **three** problems that they might have faced during the study.   **(3 marks)**

10.  (a) (i) Distinguish between management and Conservation of Environment.   **(2marks)**
    (ii) Apart from flooding, give **two** other forms of environmental hazards experienced in Kenya.
                                      **(2marks)**

 (b) (i) Identify **three** districts that are prone to frequent flooding.   **(3marks)**
    (ii) Explain **four** measures that are taken to control flooding in Kenya.   **(8marks)**
    (iii) State **four** problems resulting from flooding.   **(4marks)**
 (c) Explain **three** reasons why it is necessary to manage and conserve the environment.   **(6marks)**

**KCSE PREDICTION 9**
**PAPER 1**
**SECTION A**
*Answer ALL Questions.*
1.  (a) Define asteroids?                                                                                      (2marks)
    (b)  State **two** weaknesses of the passing star theory.                              (2marks)
2.  (a)  Apart from rainfall, name two other forms of precipitation common in Kenya.    (2marks)
    (b)  Name **three** instruments found in a Stevensons screen.                        (3marks)
3.  (a)  State **two** sources of underground water.                                         (2marks)
    (b)  Highlight **three** significance of Karst regions.                                   (3marks)
4.  (a)  Outline **two** external land forming processes that lead to formation of lakes.   (2marks)
    (b)  Describe the formation of Lake Victoria.                                            (4marks)
5.  (a)  State **two** factors that influence the leaching of soil.                            (2marks)
    (b)  Give t**hree** causes of soil degradation.                                             (3marks)
    **SECTION B**
    **Answer question 6 and any other two questions.**
6.  Study the map of Oyugis 1:50,000 (Sheet 130/1) provided and answer the following questions:-
    (a)  (i)   What type of map is the Oyugis sheet?                                           (1mark)
         (ii)  What is the latitudinal and longitudinal location of the South West edge of the map?   (2marks)
         (iii)  Identify **two** man-made features in grid square 7717.                         (2mks)
    (b)  (i)  What is the lowest point of the area covered by the map?                       (1mark)
         (ii)  Citing evidence, identify **three** economic activities in the area covered by the map.   (3marks)
         (iii) Give the six figure grid reference for the spot height to the North West.      (2marks)
         (iv) Calculate the area of Kodera forest.  Give your answer in kilometres.           (2marks)
    (c)  Describe the relief of the area covered by the map.                                  (4marks)
    (d)  (i)   Draw a square of 5cm to represent area bound by Eastings 71&76 and Northings 32&37 .
         (ii)  On the sketch map, mark and name the following:-
              •  River Sare
              •  Oluso hill
              •  Kokungu dam
              •  All weather road loose surface
              •   Spot height number 4946                                                     (7marks)
         (iii)      Calculate the new scale of the sketch map.                                (2marks)
7.  (a)  Define the term vulcanicity.                                                          (2marks)
    (b)  Differentiate between a sill and a dyke.                                              (2marks)
    (c)  (i)  Apart from volcanoes, name two other features resulting from extrusive volcanic activity.(2marks)
         (ii)  State **two** characteristics of a shield volcano.                              (2marks)
    (d) Describe how the following features are formed:
         (i)  Geyser                                                                           (5marks)
         (ii)  A crater                                                                        (4marks)
    (e)   Explain **four** significance of vulcanicity to the economy of Kenya.               (8marks)
8.  (a)  What is river regime?                                                                 (2marks)
    (b) State **two** factors that influence the velocity of water in a river.                (2marks)
    (c)  Use the diagram below to answer the following questions:-
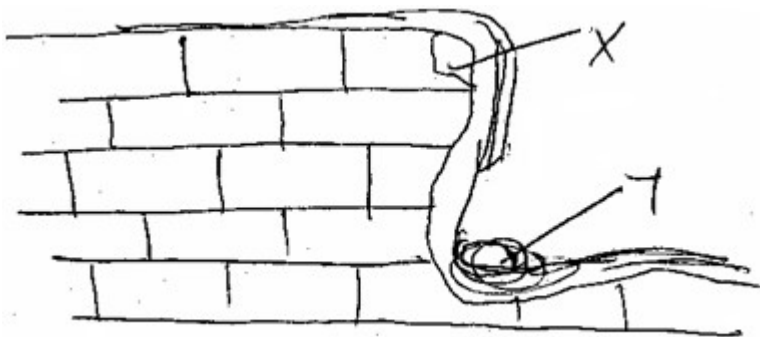
(i) Identify the feature drawn above. (1mark)
(ii) Name the parts X and Y. (2marks)
(iii) State **two** economic importance of the feature above. (2marks)
(d) (i) Name **three** types of river erosion. (3marks)
(ii) State **three** conditions for a river capture to occur. (3marks)
(e) (i) State **three** conditions for a river capture to occur. (3marks)
(ii) Describe the process of a river capture. (4marks)
(f) Describe the centripetal drainage pattern. (2marks)
9. (a) (i) List **three** types of desert surfaces. (3marks)
(ii) Explain **two** processes of wind erosion. (4marks)
(b) Using well labeled diagrams, describe how the following features are formed.
(i) Mushroom blocks (4marks)
(ii) Seif dune (4marks)
(c) Explain **three** factors influencing wind transportation. (6marks)
(d) State **four** importances of desert landforms.
10. a) Differentiate between mass wasting and mass movement. (2 marks)
b) i) State **two** causes of soil creep. (2 marks)
ii) Explain **three** factors influencing mass wasting. (6 marks)
c) i) List **four** processes of chemical weathering. (4 marks)
ii) Describe the following physical weathering processes.
• Slaking (3 marks)
• Exfoliation (3 marks)
d) Students are planning to carry out a field study of on area affected by mass wasting.
i) How did they prepare for the field study? (2 marks)
ii) Identify **three** follow-up activities. You are likely to undertake after the study. (3 marks)

**PAPER 2**
**SECTION A**
*Answer ALL Questions.*
10. (a) Define the term ranching as used in livestock farming. (2mks)
(b) State **three** economic factors influencing agriculture. (3mks)
11. (a) Differentiate between market gardening and horticulture. (2mks)
(b) Give **two** reasons why market gardening is practiced near major urban centres. (2mks)
12. (a) What is land reclamation? (2mks)
(b) State **three** physical problems experienced by farmers at Mwea-Tebere irrigation scheme. (3mks)
(c) Apart from irrigation, give **two** methods used to reclaim land in Kenya. (2mks)
4. (a)Apart from drought, identify any two other types of natural hazards in Kenya. (2marks)

(b) State three problems associated with drought. (3marks)
5. (a) Other than Ghana identify two other countries producing cocoa in Africa. (3marks)
(b)Name two ports through which cocoa is exported from Ghana. (2marks)

## SECTION B
**Answer question 6 and any other two questions from this section.**

6. The table below shows statistics for major oil producers in the middle East in 2012 in ,000 barrels per day.

| Country | Oil production | Exports | Domestic consumption |
|---|---|---|---|
| Iran | 3589 | 1880 | 1709 |
| Iraq | 3087 | 2235 | 852 |
| Kuwait | 2797 | 2414 | 406 |
| Saudi Arabia | 11726 | 8865 | 2861 |
| UAE | 3213 | 2595 | 618 |

(a) (i) Draw a divided rectangle 15cm long to illustrate oil production in Middle East. (6mks)
    (ii) Calculate the total amount of oil exported from the region. (2mks)
    (i)      Which country had the highest rate of domestic consumption. (3mks)

(b) Explain **four** benefits of Soda Ash mining to the economy of Kenya. (8mks)
(c) Explain **three** negative effects of mining on the environment. (6mks)

7. (a) (i) What is forestry? (2mks)
    (ii) Explain **four** factors favouring forestry in highland areas of Kenya. (8mks)

(b) Compare forestry in Kenya and Canada. (8mks)

(c) (i) Name **three** hardwood tree species grown in Kenya. (3mks)
    (ii) Give **four** problems facing forestry in Kenya. (4mks)

8. (a) (i) Name **two** varieties of coffee grown in Kenya. (2mks)
    (ii) Explain how the following problems have affected coffee growing in Kenya:
      • Inadequate capital (2mks)
      • Fluctuation of prices of coffee in world market. (2mks)

(b) Describe the stages involved in coffee growing from land preparation is harvesting. (6mks)
(c) (i) List **three** exotic dairy breeds reared in Kenya. (3mks)
    (ii) Explain **three** physical conditions that favour dairy farming in Denmark. (6mks)

(d) (i) Name **two** dairy products. (2mks)
    (ii) Name **two** ports through which beef is exported from Argentina. (2mks)

9. (a) Name **two** types of fisheries. (2mks)
   (b) Study the world map below and use it to answer the questions that follow.
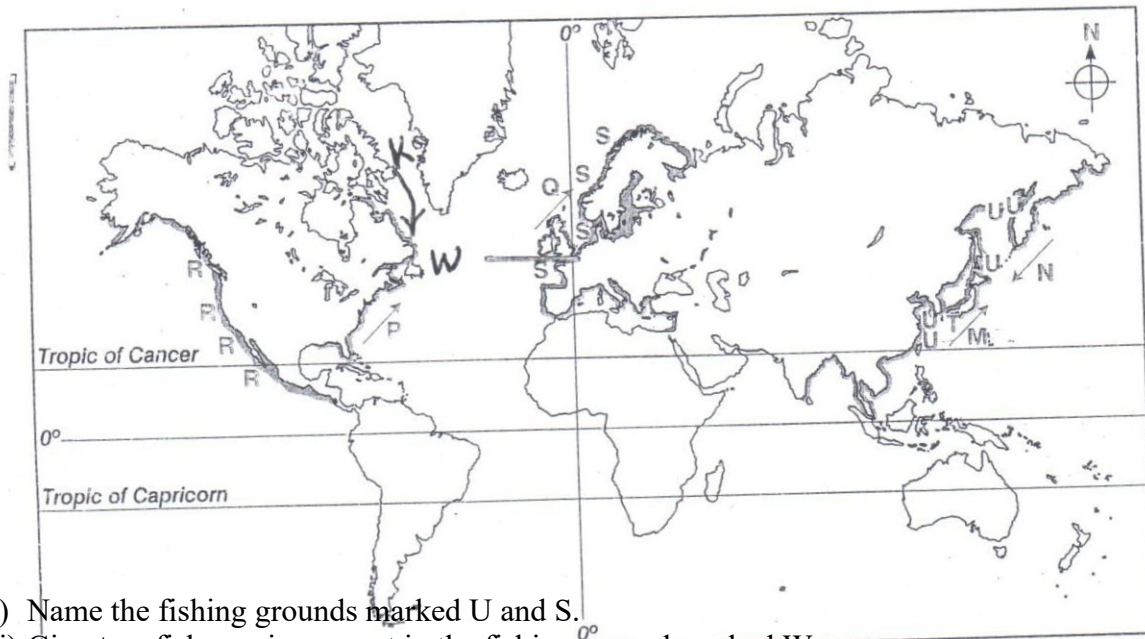
(i)  Name the fishing grounds marked U and S.                                                    (2mks)
(ii) Give **two** fish species cangut in the fishing ground marked W.                            (2mks)
(iii)Explain why major fishing grounds of the world are located in the temperate latitude of
     the Northern Hemisphere.                                                                     (6mks)
(c) Describe trawling as a method of fishing.                                                     (5mks)
(d) Explain **four** ways in which the Kenya government is promoting the fishing industry in
    the country.                                                                                  (8mks)
13. (a)  (i)  Apart from petroleum, name **two** other non-renewable sources of energy.          (2mks)
         (ii)  State **three** conditions that are necessary for the formation of petroleum.      (3mks)
    (b) Use the map of Africa below to answer questions that follow.
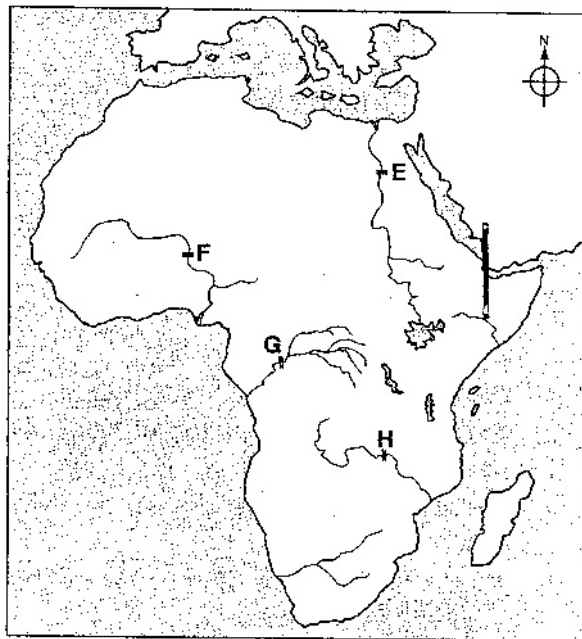


    Name the power projects marked E, F, G and H.                                                 (4mks)
(c) Explain **four** physical factors that influence the location of a Hydro-electric power station.   (8mks)
(d)  Explain **four** benefits that have resulted from rural electrification in Kenya.            (8mks)

**KCSE PREDICTION 10**
**PAPER 1**
**SECTION A**
*Answer all questions in this section*
1)a) What is an inland delta?          (2mks)
  b) Name any three sources of rivers          (3mks)
2)a) Identify two sources of water found in a lake     (2mks)
  b) State three causes of Salinity in lake Magadi     (3mks)
3)a) Name the two solstices (2mks)
b) Describe the solar system (3mks)
4)a) List any two natural vegetation zones found on a mountain slope in Africa (2mks)
b) Give three economic uses of vegetation     (3mks)
5)a) Apart from the Sahara, name two major deserts found in Africa  (2mks)
b) Give three reasons why wind is the dominant agent of erosion in the Sahara desert. (3mks)
**SECTION B**
*Answer question 6, and any other two.*
1)  Study the map of Taita hills 1:50,000 (sheet 189/4) provided and answer the following questions.
    a)i) Give the six figure grid reference of the dispensary in the Ronge forest (2mks)
    ii) Calculate the bearing of the all-weather road loose surface D 535 from grid reference 393260 to the end at grid reference 421310   (2mks)
    b)i) Using a scale of 1cm to represent 20 meters draw a cross-section from the grid reference 400280 to 440280 (4mks)
    ii) On the cross section, mark and name the following:
    •   All weather road, loose surface   (1mk)
    •   River (1mk)
    •   Telephone line (1mk)

    iii) Calculate the vertical exaggeration (V.E) of the cross-section (2mks)
c)i) Identify three forms of transport found in the area covered by the map (3mks)
ii) Citing evidence from the map, explain three economic activities practiced in the area covered by the map (6mks)
iii) Identify three types of settlements found in the area covered by the map (3mks)
7)a)i) Name two lakes that are due to volcanic activities (2mks)
iii) Give three characteristics of lakes formed due to faulting (3mks)
b) Describe how the following lakes are formed
i) Oasis                              (4mks)
ii) Lagoon                            (4mks)
c)i) Explain three causes of salinity in lake  Magadi (6mks)
ii) Explain how a lake influences the climate of the surrounding areas. (6mks)
8)a)i) Name two substances that are suspended in the atmosphere  (2mks)
ii) State three factors that influence the amount of solar radiation that reaches the earth surface (3mks)
b)i) List any three elements of weather (3mks)
ii) Describe how the rain gauge is used to measure rainfall (4mks)
c)i) Explain three different ways that air that condenses to form rainfall is made to rise (6mks)
ii) List three types of rainfall (3mks)
iii) Explain any two main features of a Stevenson screen (4mks)
9)a) i) Name three parts of fault (3mks)
ii) Give three ways in which faults develop in the crust (3mks)
b)i) Name two types of faults (2mks)

ii) List four relief features that are associated with the Rift valley (4mks)

c)i) Name four major faulted areas of the world (4mks)

ii) Identify any three parts of the great East African Rift Valley (3mks)

d) Explain three ways that faulting influences drained on the Earth surface (6mks)

10)a) Name two types of ice masses found on mountains in East Africa (2mks)

b)i) Identify two ways in which ice moves (2mks)

ii) Name two mountains in East Africa which are ice capped (2mks)

c) Explain three factors that lead to glacial deposition (6mks)

d) You intend to carry out a field study on a glaciated landscape on Mt. Kenya.

i) Name three erosional features you are likely to observe during the field study (3mks)

ii) Explain three reasons why you would require a working schedule (6mks)

iii) Give four follow-up activities you would undertake after the field study. (4mks)

# PAPER 2

## SECTION A

*Answer all questions in this section*

1)a) Name two rivers to the West of the Rift valley that causes flooding (2mks)

b) Give three ways how floods can be controlled (3mks)

2)a) What is urbanization? (2mks)

b) Name one functional zone of an ideal urban centre (1mk)

c) State two factors which have led to the development of Mombasa as a major sea port (2mks)

3)a) Distinguish between Horticulture and market gardening (2mks)

b) Identify three reasons why horticulture is developed in Netherlands (3mks)

4) Study the map below showing the St. Lawrence sea way and the great lakes and answer question a (i), ii, (iii)



a)i)
.....
.....
ii) I
iii) N
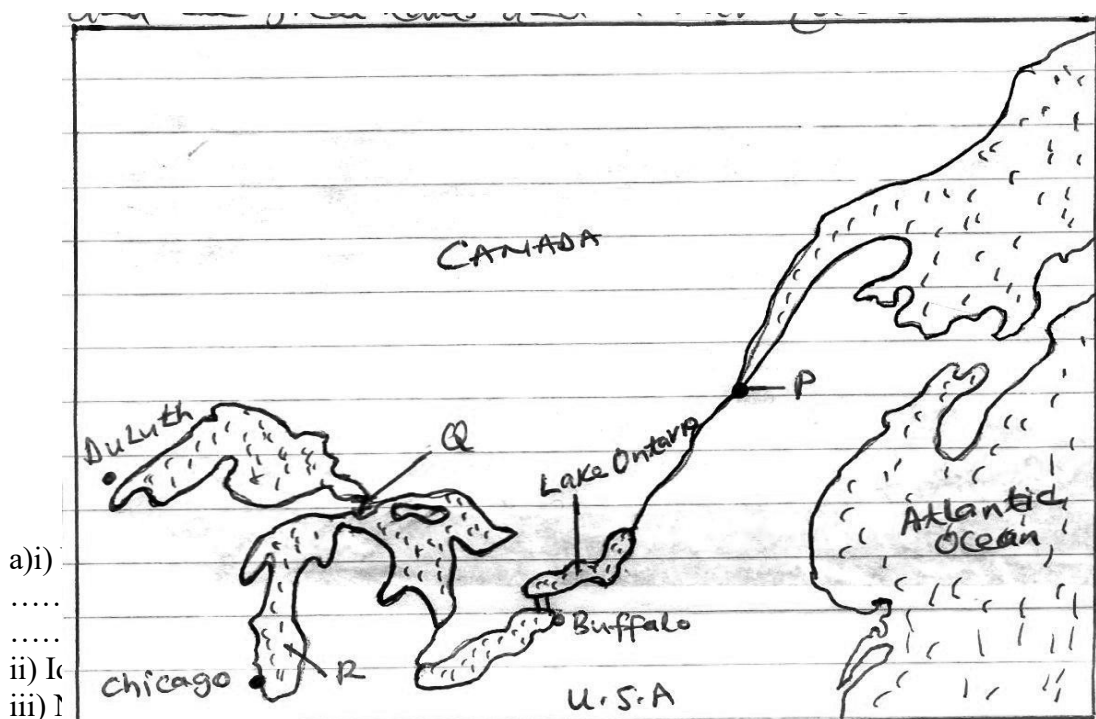
b) In what ways is Kenya going to benefit from direct air flight with United States of America (3mks)

5)a) What is the major difference between a National park and a game reserve (2mks)

b) Apart from game reserves and National park, give three ways in which wildlife is conserved in Kenya (3mks)

## SECTION B

Answer questions 6, and any other two questions.

Study the photograph below and answer questions a, b and c

a)i) Identify the type of photograph shown above (1mk)

ii) List two counties West of the Rift Valley where this crop is grown in Kenya (2mks)

iii) Draw a rectangle measuring 15cm by 10cm (1mk)

On the rectangle sketch and label the main features (4mks)

b) Briefly describe the above photograph (3mks)

c) Describe the cultivation of the above crop from land preparation to the stage shown on the photograph (5mks)

d)i) Name two dairy breeds reared in Denmark (2mks)

ii) State four physical factors that support dairy farming in Denmark (4mks)

iii) What is the role of Kenya government in dairy farming (3mks)

7)a)i) What is an industry (2mks)

ii) List two non-agricultural manufacturing industries in Kenya (2mks)

b) Give four roles of the Jua Kali Industry to the economic development of Kenya (4mks)

c)i) List two major areas where cottage industry is highly developed in India (2mks)

ii) Give five characteristics of the cottage Industry in India (5mks)

d) Study the map below showing Ruhr industrial region in Germany, and use it to answer question i, and ii belo
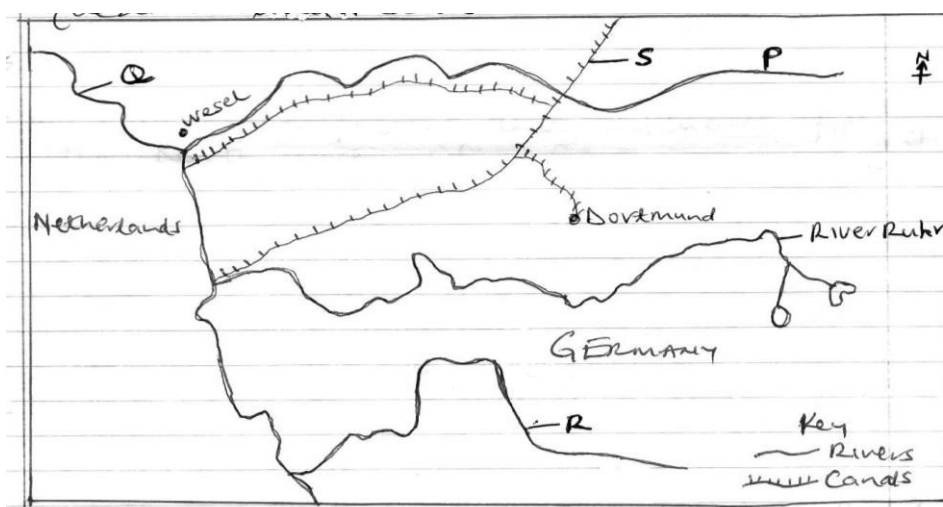
i) Identify the Rivers marked P, Q and R (3mks)
ii) Name the canal labeled S. (1mk)
e) Explain how the following factors have influenced industrial growth in the Ruhr region of Germany
i) Capital (2mks)
ii) Raw materials (2mks)
iii) Market (2mks)
8)a)i) Differentiate between pelagic and demersal fish (2mks)
ii) List two examples of demersal fish (2mks)
b) Outline four reasons why fresh water fishing is more popular in east Africa than marine fishing (4mks)
c)i) Name the Ocean current that makes the coastal water of U.S.A ice free during winter (1mk)
ii) Explain four factors that influence fishing in the North West pacific fishing ground (8mks)
d) Form four students from a school in Kisumu carried out a field study on fishing in L. Victoria
i) State one objective that they could have used for the study (1mk)
ii) State the reasons why the students needed a route map during the study (2mks)
iii) Give three advantages of studying fishing through field work (3mks)
iv) State two problems which they noted is faced by fishermen in Lake Victoria (2mks)
9)a)i) What is a fossil fuel? (2mks)
ii) List two fossil fuels that have recently been discovered in Kenya (2mks)
iii) State three formations in which mineral ore occurs (3mks)
b) Explain how the following factors influence mining
i) Value of the mineral (2mks)
ii) Transport (2mks) d
c)i) Describe how solution mining method is carried out (5mks)
ii) Give three negative effects of mining to the environment (3mks)
d)i) Name two areas where gold is mined in South Africa (2mks)
ii) Describe how diamond is processed (4mks)
10)a)i) Define the term energy (2mks)
ii) Name two non-renewable sources of energy (2mks)
b)i) Identify two potential sites in Kenya for wind energy production (2mks)
ii) State three reasons why wind energy is still underdeveloped in Africa (3mks)
c) Use the map of Africa shown below to answer question c (i
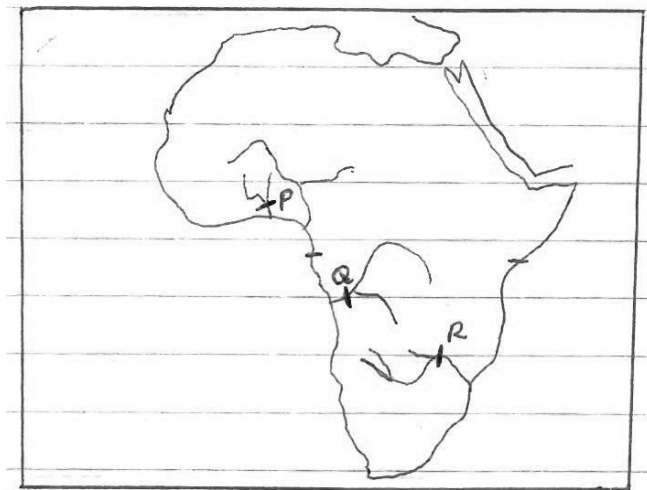


i) Name the power plant laballed P, Q and R (3mks)
ii) Explain the problems facing generation of hydro-electric power production (6mks)
iii) Apart from providing power, state three other benefits of the power dams in Africa (3mks)
d) Explain how the following two factors causes energy crisis

i) Artificial shortage (2mks)
ii) Oil prices (2mks)

# KABARAK HIGH AND SACHO JOINT(MOKASA)

**PAPER 1**

**SECTION A**

*Answer **all** the questions in this section*

1.  (a)  Define Physical Geography.                               **(2 marks)**

    (b)  State **three** importance of studying Geography.         **(3 marks)**

2.  (a)  Distinguish between weather and climate.                 **(2 marks)**

    (b)  Give **three** characteristics of ITCZ.                   **(3 marks)**

3.  (a)  List **three** sources of sedimentary rocks.             **(3 marks)**

    (b)  Give **two** examples of mechanically formed sedimentary rocks.   **(2 marks)**

4.  (a)  Describe **two** ways in which biological weathering takes place.   **(2 marks)**

    (b)  Identify **three** benefits of weathering to human activities.   **(3 Marks)**

5.  (a)  What is a river confluence?                              **(2 marks)**

    (b)  List **three** processes of river erosion.               **(3 marks)**

**SECTION B**

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

6.  Study the map of Yimbo 1: 50000 (sheet 115/1) provided and answer the following questions.

    (a)  (i)   Give the latitudinal extent of the map.           **(2 marks)**

         (ii)  What is the highest point of Usengi Hill?         **(2 marks)**

         (iii) Measure the length of the provincial boundary to the North West of the area covered by the map.  Give your answer in kilometers.
                                                                  **(2 marks)**

         (iv)  What is the area of Western Province in the area covered by the map?
                                                                  **(2 marks)**

    (b)  The rectangle below represents the area in the map extract bounded by Eastings 30 and 39 and Northings 90 and 96.

Name the features marked **Q**, **R** and **S**. **(3 marks)**

(c)     Describe the characteristics of River Yala. **(6 marks)**

(d)     (i)     Describe the relief of the area covered by the map. **(4 marks)**

(ii)    Explain **two** factors which have influenced the distribution of
        Settlement in the area covered by the map. **(4 marks)**

7.    (a)     (i)     What is folding? **(2 marks)**

(ii)    State **three** factors that influence folding. **(3 marks)**

(b)     (i)     Apart from over thrust fold, name four other types of rocks.
                **(4 marks)**

(ii)    With the aid of well-labelled diagrams, describe the formation of an
        Overthrust fold. **(8 marks)**

(c)     Explain **four** significance of Fold Mountains to human activities. **(4 marks)**

8.    (a)     Give **three** ways in which the shape of landmasses may influence the
              Movement of ocean waters. **(3 marks)**
      (b)     Distinguish between Constructive waves and the Destructive waves.
              **(2 marks)**
      (c)     Describe **three** processes of wave erosion along the coast. **(9 marks)**

(d)     The diagram below shows a wave deposition feature.
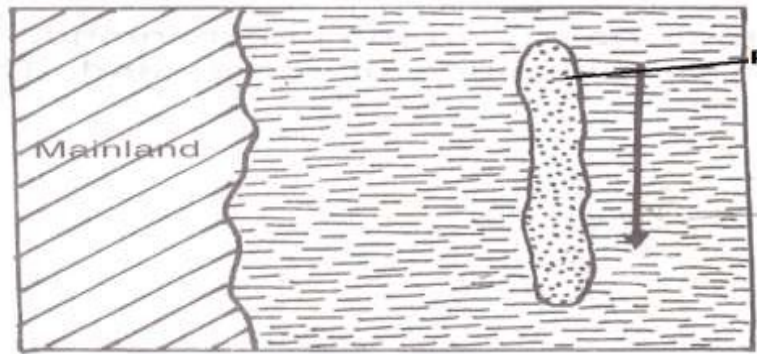
(i) Identify the feature labelled **P**. **(1 mark)**

(ii) State **two** factors that favors the formation of the feature named in (i) above **(2 marks)**

(e) Students from Gedi Secondary School conducted a field study on coastal landforms.

(i) Identify **three** objectives for their study. **(3 marks)**

(ii) Give **three** preparations they made for their study. **(3 marks)**

(iii) Mention **two** methods they might have used to collect information before the actual field study. **(2 marks)**

9. (a) (i) Define underground water. **(2 marks)**

(ii) Explain how the following factors influence availability of Underground water. **(2 marks)**
- Slope of the land
- Vegetation cover

(b) (i) State **three** conditions that are necessary for the formation of an Artesian well. **(3 marks)**

(ii) State **three** problems that are associated with an artesian well. **(3 marks)**

(c) (i) Differentiate between a Karst scenery and Karst region. **(2 marks)**

(ii) The diagram below shows the underground features in limestone areas.
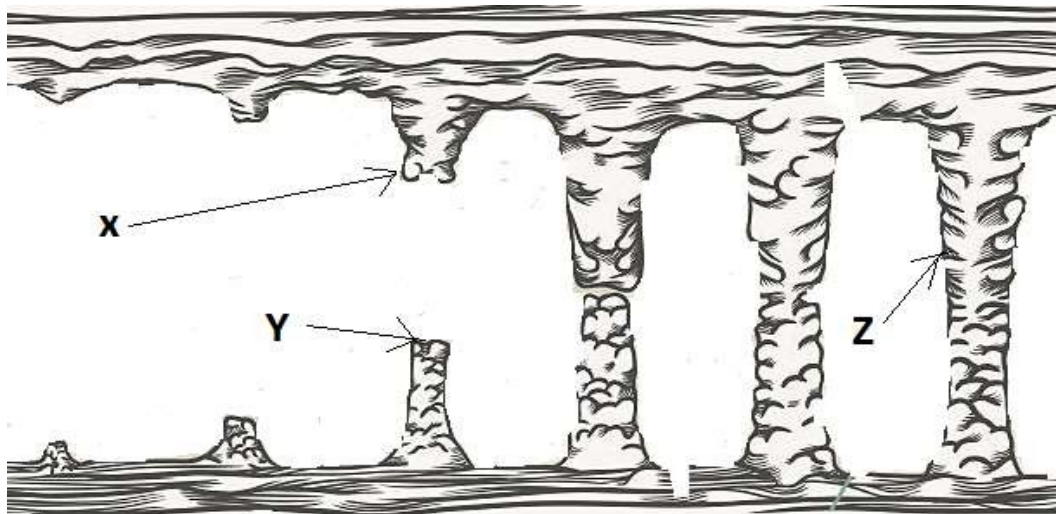
Identify the features marked **X**, **Y** and **Z**.  (3 marks)

(d) Form four students of a school are planning to carry out a field study on a Karst landscape around their school.

(i) Name **two** surface features are likely to identify.

(2 marks)

(ii) Give **three** reasons why they needed a working schedule.  (3 marks)

(iii) Why was it necessary for them to divide into **groups** during their study?

(3 marks)

10. (a) What is soil?  (2 marks)

(b) (i) Name **three** components of soil.  (3 marks)

(ii) Describe how the following factors influence the formation of soil.
- Topography  (3 marks)
- Nature of the parent rock  (3 marks)

(c) (i) Define soil profile.  (2 marks)

(ii) The diagram below represents a well-developed soil profile. State the characteristics of horizon **A**.  (4 marks)
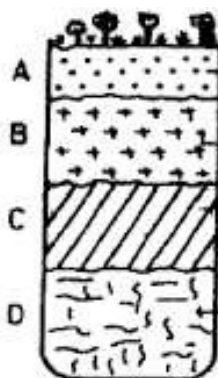


(d) Explain **four** ways in which farming practices may lead to loss of soil fertility.

(8 marks)

**PAPER 2**

**SECTION A**

Answer ALL questions in this section.

1. a) Name two ports through which some minerals mined in East Africa are exported. (2 marks)
   b) State three ways in which mining derelicts can be reclaimed. (3 marks)
2. a) What is biogas? (2 marks)
   b) State three advantages of Uranium as a source of power. (3 marks)
3. a) State three reasons why the Northern part of Kenya is sparsely populated. (3 marks)
   b) Give two types of information that can be obtained from a population pyramid. (2 marks)
4. a) What is urbanisation? (2 marks)
   b) State three factors that favoured the growth of Eldoret town. (3 marks)
5. a) Define horticulture. (2 marks)
   b) List three characteristics of horticulture. (3 marks)

**SECTION B**

Answer question 6 and any OTHER TWO questions in this section.

6. The data given shows world cocoa production from West African countries.

| Country | Percentage |
|---|---|
| Ghana | 26.1 |
| Nigeria | 24.9 |
| Cameroon | 18.2 |
| Cote d'Ivoire | 11.6 |
| Others | 19.2 |

a) Draw a pie chart to represent the data. Show your calculations. (6 marks)
b) List two advantages of using a pie chart to represent data. (2 marks)
c) i) Name two ports through which Ghana exports its cocoa. (2 marks)
   ii) State three physical conditions that favour the production of cocoa in Ghana. (3 marks)
d) i) Describe the growing of cocoa under the following sub headings.
      Cultivation. (3 marks)
      Harvesting and processing. (4 marks)
   ii) Give five problems facing cocoa growing in Ghana (5 marks)
7. a) i) Name **three** agricultural non food processing industries in Kenya.
      ii) State **four** ways in which Kenya has benefited from the motor vehicles industry.
      (4 marks)
   b) Explain **three** problems arising from industrialization in Kenya. (6 marks)
   c) Explain **three** factors that favoured the establishment of the electronics industry in Japan. (6 marks)
   d) You intend to carry out a field study on Jua Kali industries in your local market.
      i) State **two** reasons why it will be necessary for you to visit the area of study in advance.(2 marks)
      ii) For your field study, you have prepared a work schedule. State two items you could include in the schedule.(2 marks)
      iii) Give **two** advantages of studying Jua Kali industries through field study. (2 marks)
8. a) i) Define the term energy. (2 marks)
      ii) Identify the type of energy from the following sources.
      a) sun (1 mark)

b) uranium (1 mark)

c) wind (1 mark)

b) The diagram below shows the location of Hydro electric power stations in Kenya. Use it to answer questions below.
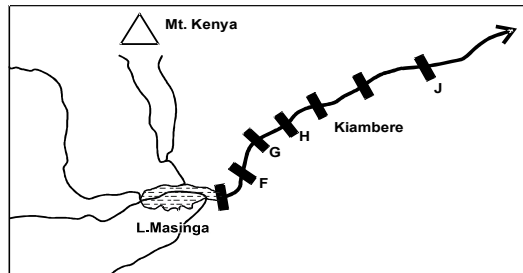


i) Name the HEP projects F, G, H. (3 marks)

ii) Name the proposed dam and power station marked J. (1 mark)

c) i) Explain **three** benefits of hydro electric power projects to the economies of the East African countries. (6 marks)

ii) Explain two physical factors that have influenced the location of the owen falls hydroelectric power project in

Uganda. (4 marks)

iii) Apart from Owen falls dam, name two other hydroelectric power projects in Uganda. (2 marks)

d) Your geography class intends to carry out a field study at Olkaria geothermal power plant.

i) State **two** objectives of your study. (2 marks)

ii) What **two** follow-up activities are they likely to engage in after the study. (2 marks)

9. a) i) Apart from draining swamps, give two other methods through which land has been reclaimed in Kenya.(2 marks)

ii) Give **two** methods that are used to drain swamps in Kenya. (2 marks)

b) i) Name **two** rivers that supply water to the Mwea irrigation scheme (2 marks)

ii) Explain how the following factors influenced the establishment of Mwea irrigation scheme.

- Topography (2 marks)
- Soils (2 marks)
- Population (2 marks)
- Government policy (2 marks)

c) i) Name **three** areas that make up the Zuider zee reclamation project in the Netherlands. (3 marks)

ii) Explain **four** differences between reclamation in Kenya and the Netherlands. (8 marks)

10. a) i) Differentiate between a settlement pattern and a settlement. (2 marks)

ii) Apart from dispersed and nucleated settlement, name **two** other types of settlements. (2 marks)

b) State **three** factors that may lead to :

i) Nucleated settlement (3 marks)

ii) Dispersed settlement. (3 marks)

c) i) State **three** characteristics of the Central Business District. (3 marks)

ii) Explain **three** problems Mombasa faces as it grows. (6 marks)

d) With relevant examples, state **six** functions of New York city. (6 marks)

# ASUMBI GIRLS HIGH SCHOOL

**PAPER 1**

<u>**SECTION A (25 MARKS)**</u>

*Answer **all** the questions in this section.*

1. a)     What is the relationship between Geography and medicine.     (2 marks)
   b)     State **three** characteristics of Planet earth.     (3 marks)

2. (a) What are harmattan winds.     (2marks)
   (b) The diagram **below** shows a type of wind
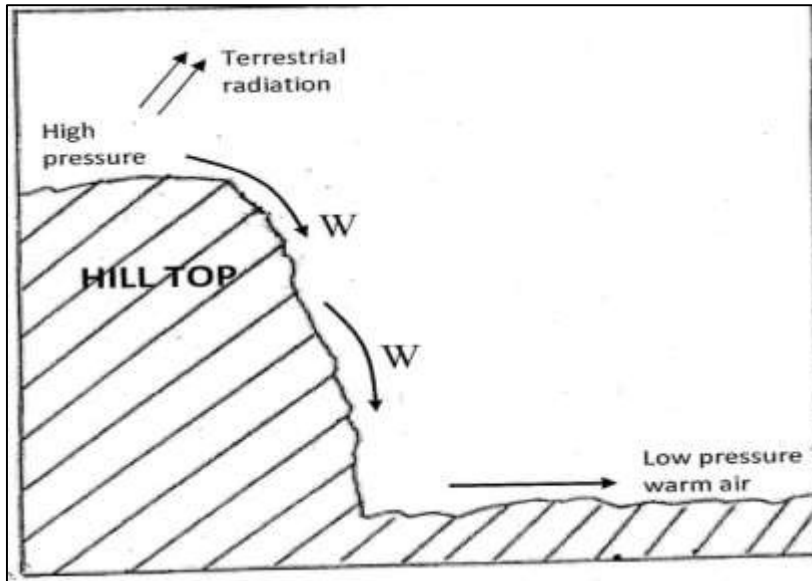


    (I)     Identify the type of wind marked **W**     (1 mark)
    (II)     List two characteristics of the type of wind marked **W**     (2 marks)

3. (a) What are limbs in a fold?     (2 marks)
   (b) List <u>three</u> theories put forward by scientists on the formation of Fold Mountains. (3 marks)

4. (a) Distinguish between a seismic focus and epicenter.     (2marks)
   (b) Identify three major earthquake belts of the world.     (3marks)

5. (a) Name **two** warm ocean currents in Africa.     (2marks)
   (b) State **three** factors that influence ocean water temperature.     (3marks)

<u>**SECTION B (75 MARKS)**</u>

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

6. a)   (i) Give the map tittle     (2mark)
       (ii) Give the longitudinal extent of the area covered by the map     (2 marks)

  b) (i) Give the index to adjoining sheet to the North west of the area covered by the map   (1mark)

(ii)    Convert the scale of the map to statement scale.                                    (2 marks)

(iii)   Calculate the area covered by western province. Give your answer in square km      (2 marks)


c) (i) Using a vertical scale of 1cm rep 20m draw a cross section from grid reference 260940 to 320940.
                                                                                    (3marks)

    On it mark and label the following                                              (4marks)

            • kadimu Bay
            • Road C501/2
            • Main Tracks
            • thicket

    (ii)  Calculate the vertical exaggeration                                       (2 marks)

d) (i) Citing evidence, identify three the social activities carried out in the area covered by the map.
                                                                                    (3marks)

    (ii) Describe the relief of the area covered by the map.                        (4marks)


    1. a. (i) Name three forces responsible for the shape of the earth             (3 marks)
          (ii) Give four proofs that the earth is spherical in shape               (4 marks)


        b.   (i) What is international dateline                                     (2 marks)

             (ii) What is the longitude whose local time is 5:00 p.m. when the local time at Longitude 0° is 8:00p.m?                                                                  (2 marks)

        c. Use the diagram below to answer the questions that follow.
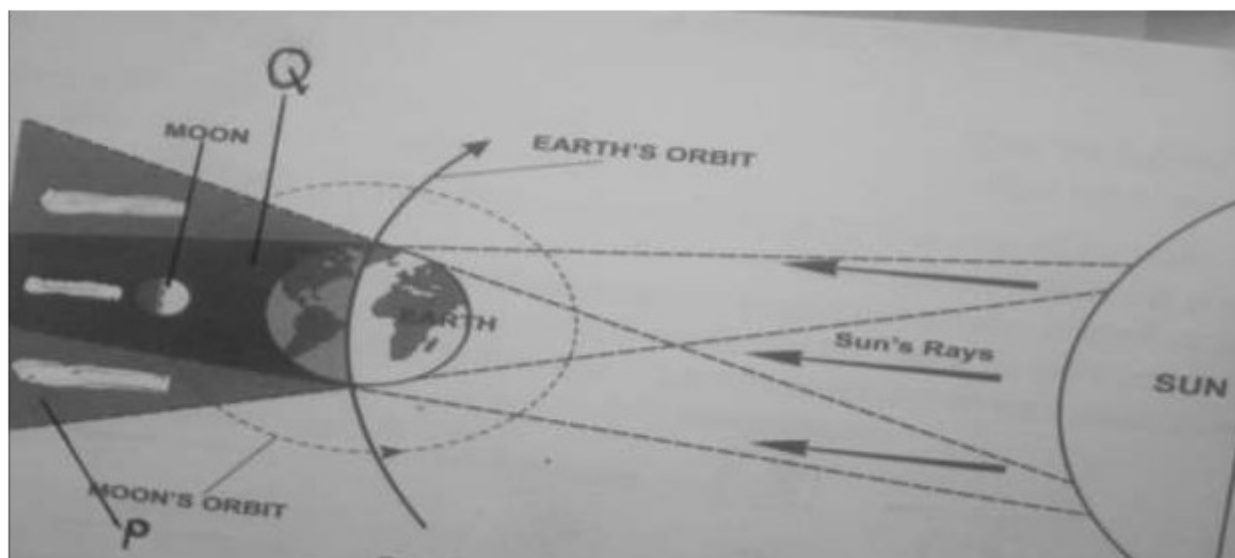
i) What type of eclipse is represented by the diagram how does it occur? (3 mark)

ii) Name the features marked P and Q                                    (2 marks)

d. The diagram below represents the structure of the earth.  Use it to answer the questions that follow.
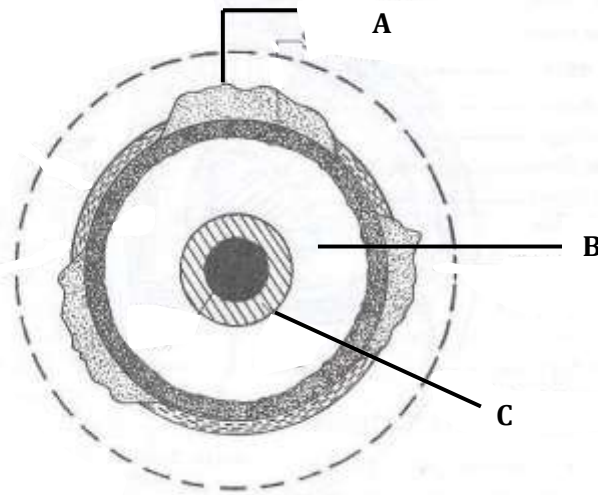


(i) Name the parts marked **A, B** and **C.**                          (3 marks)
(ii) Give four characteristics of the layer marked B                   (4 marks)
(ii) Name any *two* constituents of the atmosphere.                    (2 marks)


2.  a. (i) What is a climax vegetation?                                 (2 mark)
        (ii) State **four** characteristics of the mediterenean type of vegetation    (4 marks)

    b. Explain **three** factors which influence the distribution of vegetation in Kenya    (6 marks)

    c. Give Reasons why Tundra region has scanty vegetation.           (3 marks)

    (c) Write the names of the grasslands found in the following areas    (3 marks)

        (i) East Africa

        (ii) Canada

        (iii) Argentina

(d)    You are required to carry out a field study of the vegetation within the local environment:

       (i)    Apart from identifying the different types of plants, state **three** other activities you will carry out during the field study.                (3 marks)

       (ii) Give three reasons why it would be necessary to sample out part of the area covered by the vegetation for the study                               (2 marks)

       (iii)   List three methods they may have used to collect data    (2marks)

9.     (a)    Distinguish between river regime and river discharge.     (2 marks)

(b) (i) State *three* factors influencing river transport. (3 marks)

(ii) Explain *three* ways through which a river transports its load. (6 marks)

(c) With the aid of a well labelled diagram, describe how a river braid is formed. (6 marks)

(d) Students of Buruburu Girls High School carried out a field study on river rejuvenation on River Athi.

(i) State *three* causes of river rejuvenation they found out. (3 marks)

(ii) Name *any three* types of meanders they are likely to have identified. (3 marks)

(iii) Identify *two* problems they may have encountered during the field study. (2 marks)

10. (a) (i) What is soil? (2 marks)

(ii) Identify *two* components of soils. (2 marks)

(iii) Differentiate between soil structure and soil texture. (2 marks)

(iv) Name *two* types of soil according to soil texture. (2 marks)

(b) Explain how the following factors influence the formation of soil.

(i) Climate (2 marks)

(ii) Topography (2 marks)

(c) The diagram below shows a soil catena.



| HILL TOP | | | VALLEY BOTTOM |
|---|---|---|---|
| W | X | Y | Z |
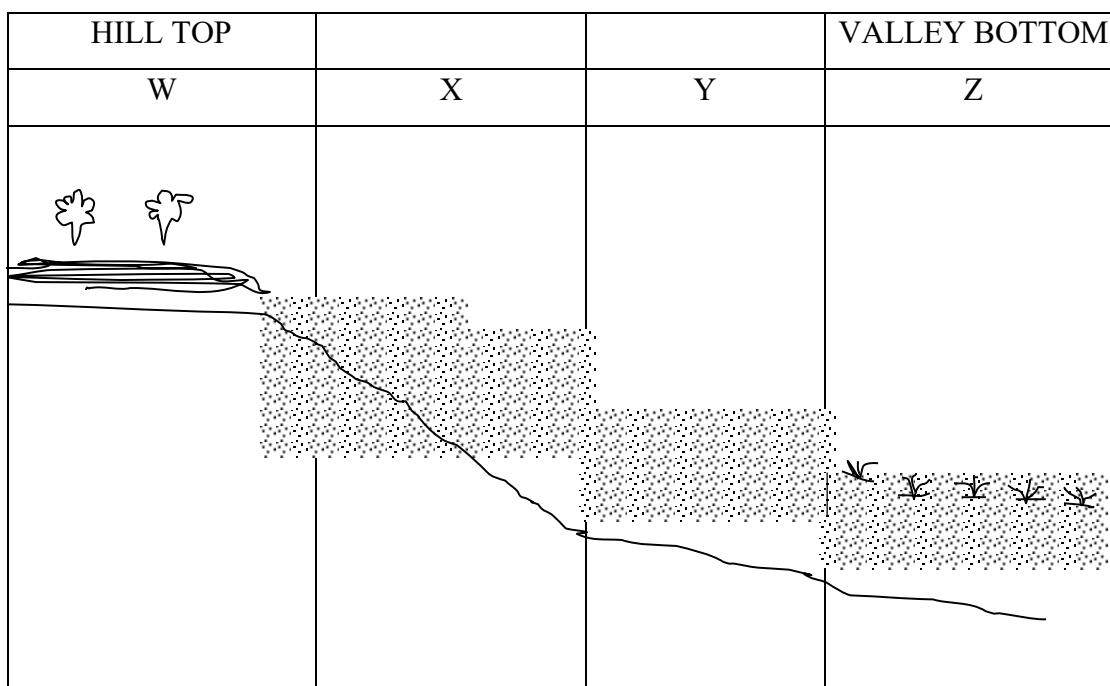
(i) Name the type of soils found in position **W** and **Z**. (2 marks)

(ii) State *two* characteristics of soils found in section marked **W** and **Z.** (4 marks)

(d) Explain *two* causes of chemical soil degeneration. (4 marks)

(e) State *three* measures of conserving soils. (3 marks)

**PAPER 2**

## SECTION A

Answer all the questions in this section

1  a) What is human geography?   (2 marks)
   b)   State three ways in which the study of Geography contributes to National development.
                                                                          (3 marks)

2. a) Apart from coniferous forest, name two other types of natural forests. (2 mks)
   b) State three characteristics of coniferous which favour their exploitation. (3 mks)

3. a) Give the characteristics of plantation agriculture in Kenya.  (3 marks)
   b) State 2 problems facing coffee farming in Kenya.  (2 marks)

4  a) Study the map of the Ruhr Industrial region and use it to answer the question below
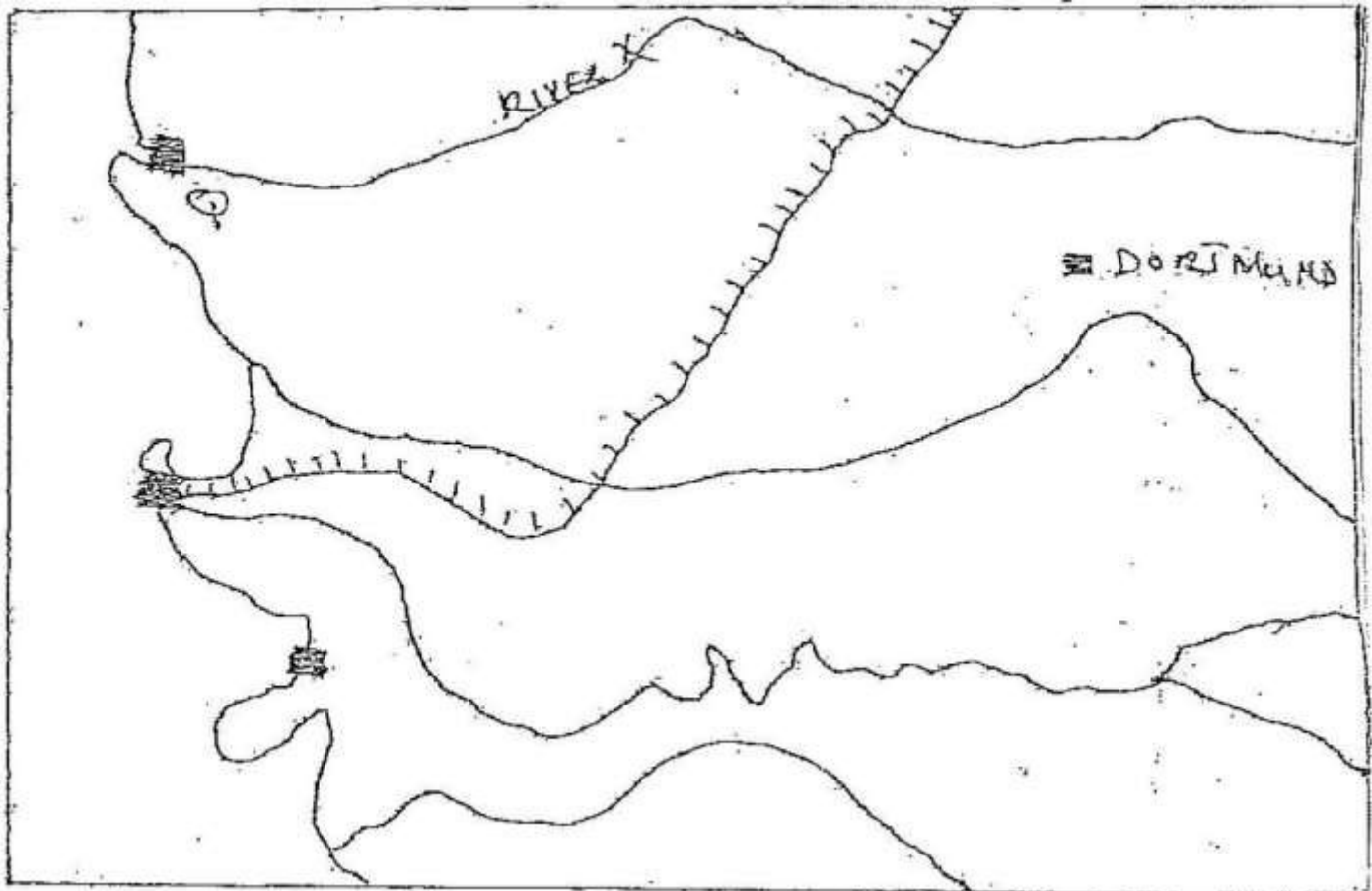


      (i) Name
     (ii) The town marked Q    (1 mark)
     (iii)  The River marked X   (1 mark)

b) Apart from the iron and steel, list 3 other industries in the region.   (3 marks)

5.  a) State three causes of urban rural migration   (3 marks)
    b) Give two reasons for rapid population growth.   (2 marks)

## SECTION B (75 MARKS)

Answer question 6 and any other TWO questions from this section.

6.  The table below shows the number of tourists who visited Kenya between 1996 -1999.  Use it to answer the questions that follow.

| Origin/Year | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|
| Britain | 100,000 | 80,000 | 60,000 | 40,000 |
| N. America | 80,000 | 50,000 | 45,000 | 45,000 |
| Germany | 70,000 | 40,000 | 35,000 | 30,000 |
| S.E Asia | 40,000 | 30,000 | 25,000 | 25,000 |

(a)  Using a scale 1 cm to represent 20,000 people, draw a compound bar graph to present this data. (6 marks)
(b)  State possible reasons for the decline in the number of tourists since 1997   (4 marks)
(c)      (i) What is eco-tourism      (2 marks)
         (ii) State two objectives of eco-tourism.      (2 marks)
(d)  Explain three factors that hinder development of domestic tourism in Kenya.   (6 marks)
(e)  Identify five steps taken by the Kenya government to promote tourism in the country.   (5 marks)
7.  Study the sketch map of the great lakes of St.  Lawrence
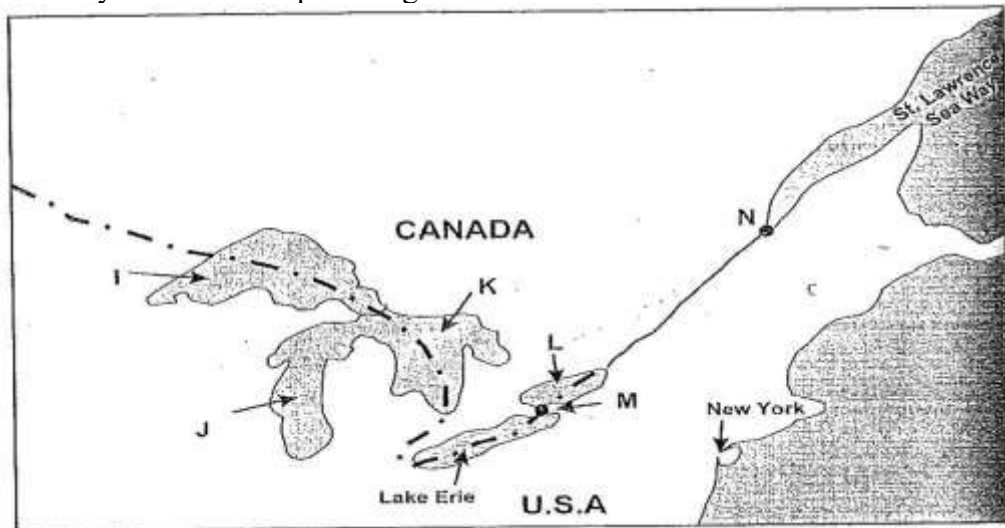


a)  Name
    i)      The port marked N. (1 mk)
    ii)     The waterfall marked M (1 mk)
    iii)    The lakes marked I, J, K, L (4 mks)

b)  Explain five ways in which the great lakes of St. Lawrence sea way has contributed to the economy of Canada and USA. (10 mks)

c) i) State three recent developments that have taken place in Kenya to improve communication of information. (3 mks)

ii) Explain three problems facing telephone as a means of communication in Kenya. (6 mks)

8. (a) (i) What is Environmental Hazards. (2 marks)

(ii) Identify three environmental hazards caused by human activities. (3 marks

(b) (i) State three cause of floods. (3 marks)

(ii) Explain four ways of combating floods in Kenya. (8 marks)

(c) Students from your school carried out a field study on a flood prone area in your country.

(i) State four reasons why the working schedule is very important in their study. (4 marks)

(ii) List two methods of data collection they are likely to use. (3 marks)

(iii) Name two areas in Kenya prone to flooding. (2 mks)

(9) a) (i) Apart from nuclear energy name three other non-renewable sources of energy. (3 marks)

(ii) State three factors that hinder development of nuclear energy in many countries. (3 marks)

(b) (i) Explain the three effects of overdependence of petroleum on the economy of oil importing countries. (6 marks)

(ii) State 3 methods that Kenya can use to conserve her energy. (3 marks)

(c) Give reasons why Kenya has not been fully able to fully exploit her geothermal potential. (4 marks)

(d) Use the map of Africa to answer the questions that follow
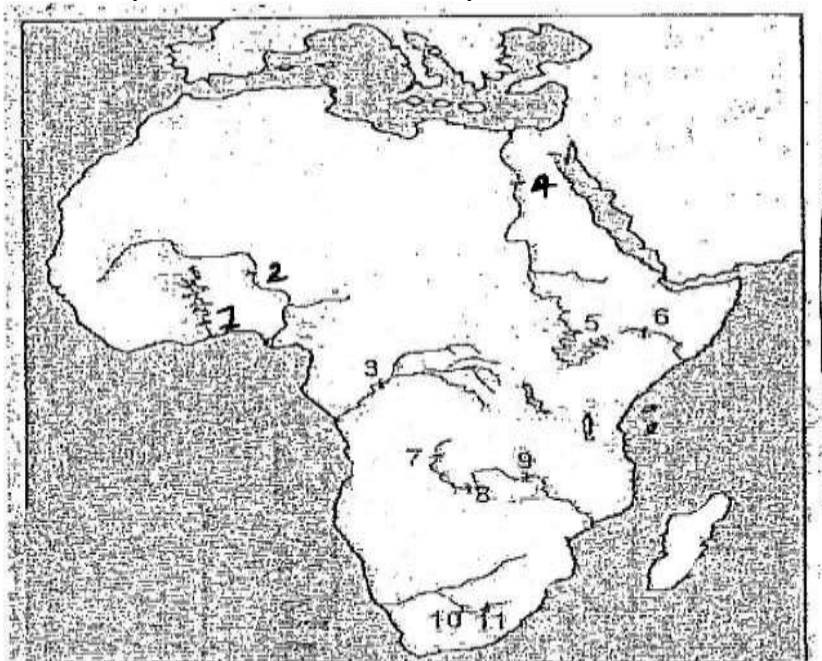


(i) Name the H.E.P projects that are marked 1,2,5,6. (4 marks)

(ii) Give two reasons why Africa has a high potential of H.E.P ( 2 mks)

10. (a) i) Name four forms of which minerals occur. (4 mks)

ii) State four factors that are necessary for the occurrence of minerals. (4 mks)

b) State three ways in which open cast mining affect the environment. (3 mks)

c) Explain four ways in which mining contribute to the economy of Kenya. (8 mks)

d) Form 4 Geography students carried out field study on mineral found in the Rift Valley

i) State three objectives of their study. (3 mks)

ii) List down three problems they are likely to come across. (3 mks)

# MARANDA SCHOOL

**PAPER 1**
**SECTION A**
*Answer all the questions in this section*

1. (a) If the time in Town **Y** which is $75^0$ W is 5 a.m., what is the time in town **P** which is $40^0$ E?(3 marks)
   (b) How does rotation of the earth cause the occurrence of day and night?                    (2 marks)
2. (a) Name *two* elements of weather that can be recorded at a school weather station.          (2 marks)
   (b) The diagram below represents a weather measuring instrument. Use it to answer the following questions.



   (i) Identify the weather element measured using the above equipment.                          (1 mark)
   (ii) Describe how the above instrument is used.                                                (2 marks)
3. Describe how igneous rocks are formed                                                          (5 marks)
4. (a) Name the types of delta found at the mouth of;
        (i) River Nile                                                                           (1 mark)
        (ii) River Omo                                                                           (1 mark)
    (b) State *three* conditions necessary for the formation of a delta    (3 marks
5. The diagram below shows mountain vegetation zones, use it to answer the questions that follow.
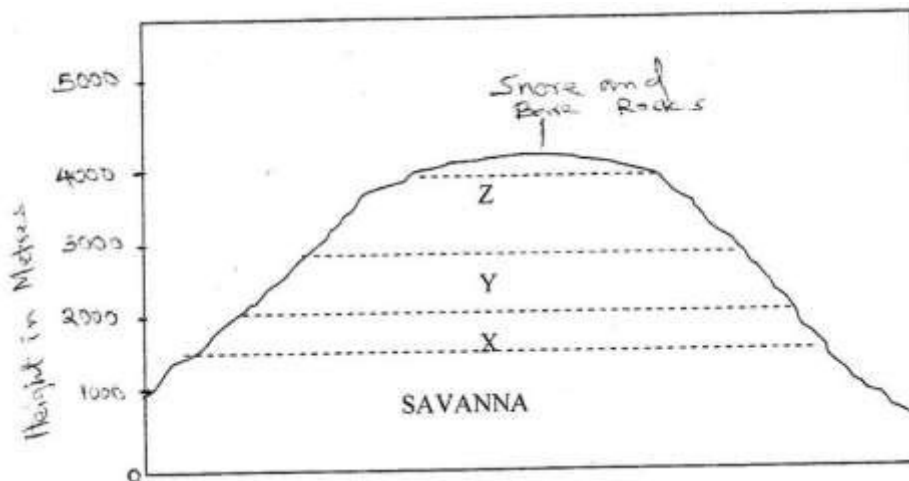


   (a) Name the vegetation zones marked **X**, **Y** and **Z**.                                  (3 marks)
   (b) State *two* reasons why the mountain top has no vegetation.                                (2 marks)
**SECTION B**
*Answer question 6 and any other two questions from this section.*

6. Study the map of Kijabe 1:50, 000(sheet 134/3) provided and answer the following questions
   (a) (i)   Identify *two* types of scales used in the map of Kijabe                                    (2 marks)
       (ii)  Name any *two* drainage features found in Kijabe                                             (2 marks)
   (b) (i)   Measure the distance of the road B3 from Narok to the junction at road 4104. Give your answers in kilometers and meters.                                                                                  (2 marks)
       (ii)  Give the economic activities represented by the following features in Kijabe               (4 marks)
             • Saw mills.
             • Water troughs
             • Forest guard post
             • Kagwe Carbacid plant
   (c) Name *three* human features found in grid square 3690.                                            (2 marks)
   (d) Describe the distribution of natural vegetation in the area covered by the map.                   (6 marks)
   (e) Citing evidence from the map, explain *three* factors that have favored trade in Kijabe area (6 marks)
7. (a) (i)   Name *one* tectonic forces that causes faulting.                                            (1 mark)
       (ii)  Differentiate between a normal fault and a reverse fault.                                   (2 marks )
   (b) Using labelled diagrams, describe how the following features are formed
       (i)   Block mountain                                                                              (8 marks)
       (ii)  Fault steps                                                                                 (8 marks)
   (c) Explain *three* ways in which faulting may influence drainage                                     (6 marks)
8. (a) (i)   Give *three* underground features found in a karst landscape                                (2 marks)
       (ii)  State *three* reasons why there are few settlements in a karst landscape.                   (3 marks)
   (b) Describe how the following surface features in limestone are formed:
       (i)   Grikes and Clints                                                                           (4 marks)
       (ii)  Uvala                                                                                       (5 marks)
   (c) Explain *three* negative effects of resultant features in limestone areas on human activities.(6 marks)
   (d) Students of Nyamira Girls High  School are planning to go for a field study in areas of Karst scenery.
       (i)   State *two* reasons why it was important to seek permission from school administration      (2 marks)
       (ii)  Give *two* reasons why they would need a map of the area of study                           (2 marks)
9. (a) (i)   Define desertification                                                                      (2 marks)
       (ii)  State *two* factors influencing wind transport                                              (2 marks)
   (b) Describe how the following features are formed:
       (i)   Oasis                                                                                       (5 marks)
       (ii)  Bajada                                                                                      (5 marks)
   (c) Explain *three* significance of desert land forms to human activities                            (6 marks)
   (d) You intend to carry out a field study in a desert landform
       (i)   Give *two* methods you would use to collect information                                     (2 marks)
       (ii)  State the follow up activities you would carry out after the field study                    (2 marks)
10. (a) What is glacier                                                                                  (2 marks)
    (b) State the distinctive characteristics of the following features resulting from glacial erosion;
        (i)   Corrie                                                                                     (2 marks)
        (ii)  A pyramidal peak                                                                           (2 marks)
    (c) Describe how the following features are formed;
        (i)   Terminal moraine                                                                           (4 marks)

(ii) Crag and Tail (4 marks)
(iii)Cirque lake (5marks)
(d) Explain *three* positive effects of glaciation in lowlands (6marks)

**PAPER 2**

**SECTION A**

Answer *all* the questions in this section

1. (a) Define the term agroforestry. (2 marks)
   (b) Give *three* uses of the mangrove trees. (3 marks)
2. (a) Name *two* areas where diamonds are mined in South Africa. (2 marks)
   (b) State *three* negative effects of mining on the physical environment. (3 marks)
3. (a) Name the spectacular wildlife activity across the Mara river that is considered one of the new wonders of nature. (2 marks)
   (b) State *three* characteristics of package tourism. (3 marks)
4. (a) Name *two* types of railway rail currently operated in Kenya by railway services. (2 marks)
   (b) State *three* conditions of roads in Kenya that may lead to motor vehicles accidents. (3 marks)
5. Below is a map of the Ruhr industrial region in Germany. Use it to answer the questions that follow.
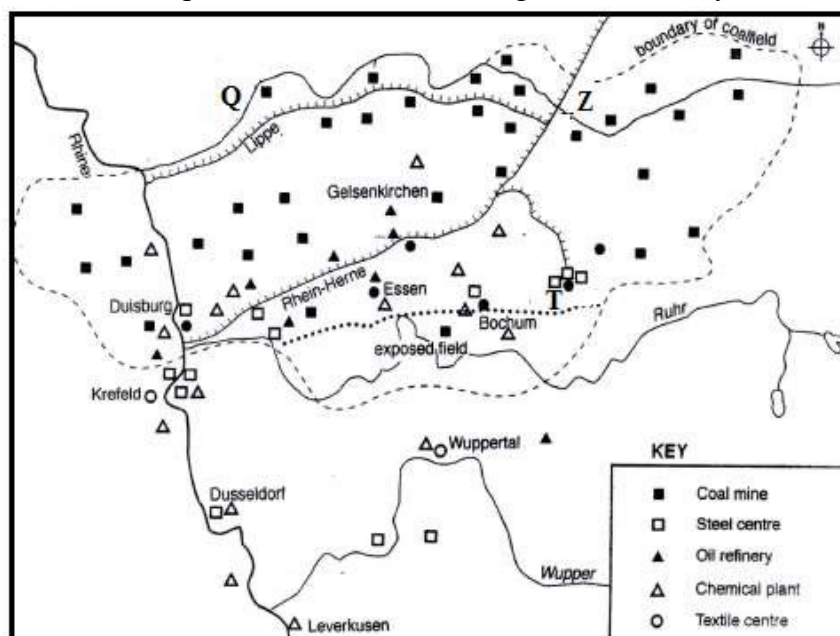


(a) Name:
   (i)   The river marked **Q**. (1 mark)
   (ii)  The town marked **T**. (1 mark)
   (iii) The canal marked **Z**. (1 mark)
(b) Give  *two* reasons why the Ruhr region has lost some of its importance as an industrial centre in recent years. (2marks)

**SECTION B**

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

6. Study the photograph below and use it to answer questions (a) and (b)

(a) (i)  Name the activity taking place in the photograph.                                    (1 mark)
    (ii)  Identify the type of photograph shown above.                                          (1 mark)
    (iii) State **three** reasons for the identification in (ii) above.                          (1 mark)
    (iv)  Identify **four** safety measures that the people in the photograph have taken as they carry out the
          above activity.                                                                        (4 marks)
(b) (i)  Draw a rectangle measuring 15cm by 10cm to represent the area covered by the photograph. (2
    (ii)  On the rectangle sketch and label **four** main features shown on the photograph        (4 marks)
(c) Below is a flow chart showing the processing of sugar cane. Study it and answer questions, 6(b) (i) and
    (ii).
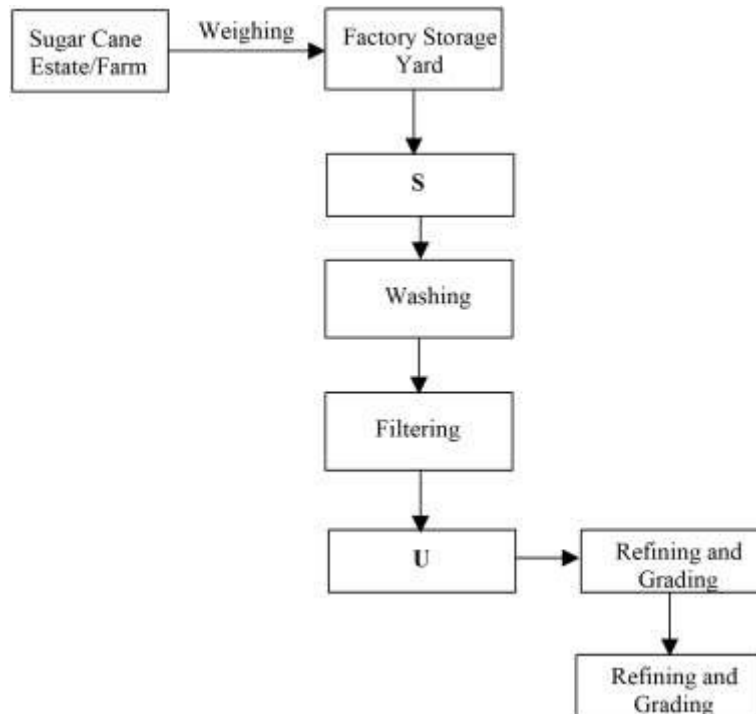
(i) Name the processes labeled **S** and **U**. (2 marks)

(ii) Give *two* bi-products from the process labeled **U**. (2 marks)

(d) Explain *three* possible solutions to the problem of exploitation by the middle men in sugar cane farming. (6 marks)

7. (a) (i) Give *two* disadvantages of using agro-chemicals as a method of controlling tsetse flies. (2 marks)

(ii) State *three* physical factors which should be considered when selecting a waste land to be reclaimed for agricultural use. (3 marks)

(b) (i) State *three* benefits that resulted from the reclamation of Yala swamp. (3 marks)

(ii) Give *three* advantages of irrigation over rain fed agriculture. (3 marks)

(c) The map below shows some irrigation schemes in Kenya. Use it to answer questions (c) (i) and (ii).
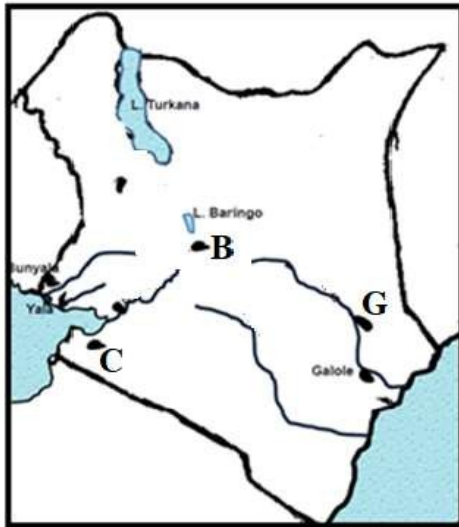


(i) Name the irrigation schemes above labeled **B**, **C** and **G**. (3 marks)

(ii) State *five* challenges which the schemes labeled **B** faces. (5 marks)

(d) (i) Name *two* main polders in the Netherlands. (2 marks)

(ii) Give *four* ways in which the polders in the Netherlands have contributed to Horticultural farming in the country. (4 marks)

8. (a) (i) Define the term fisheries. (2 marks)

(ii) State *two* characteristics of pelagic fish. (2 marks)

(b) The map below shows major world fishing grounds. Use to answer the questions that follow.
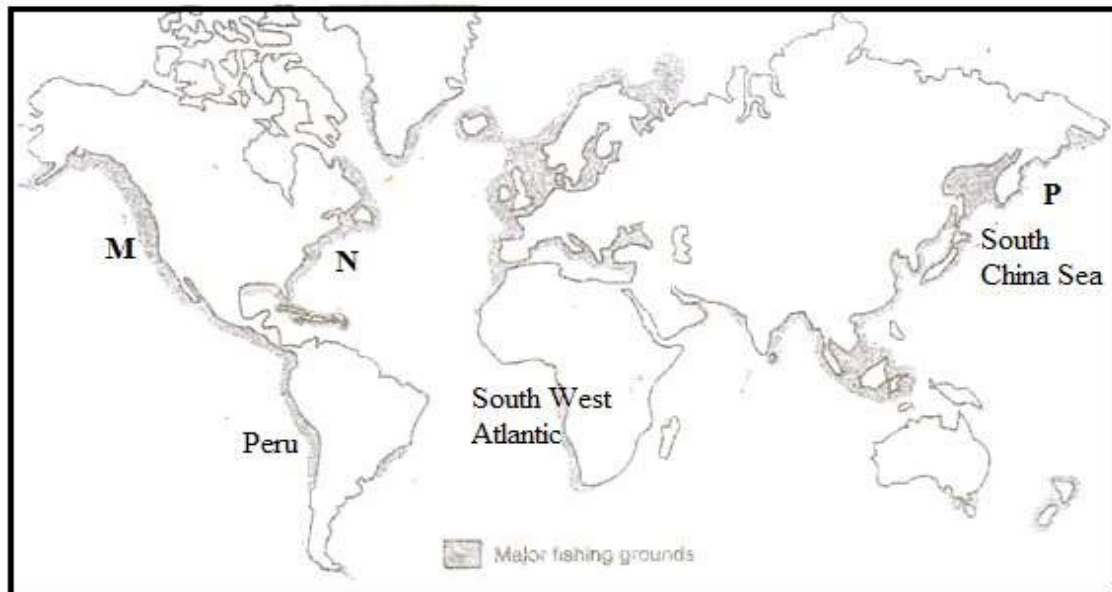
(i) Identify the *two* ocean currents that converge in the fishing ground marked **P**. (2 marks)

(ii) Name *two* major fishing countries in the South West Atlantic fishing grounds (2 marks)

(iii)State *two* physical factors favouring fishing in the South West Atlantic fisheries (2 marks)

(c) (i) Identify the fishing method below (1 mark)
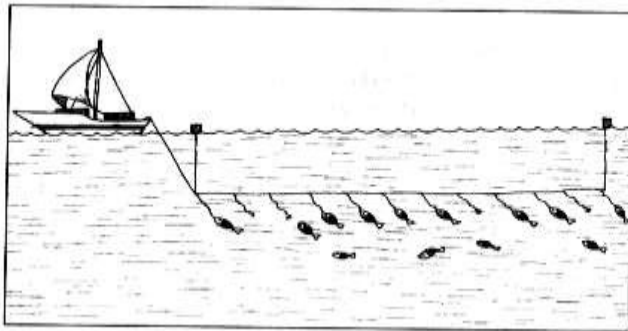


(ii) Describe how the above fishing method is carried out. (4 marks)

(d) (i)   What is fish cage farming? (2 marks)

   (ii)   Give *two* reasons why tilapia is the most common fish species in fish farming. (2 marks)

   (iii)   Compare fishing in Japan and Kenya under the following subtopics:

   • Technology (2 marks)

   • Market (2 marks)

   • Tradition (2 marks)

9. (a) The sketch map below shows Hydro-Electric power stations along River Tana. Use it to answer the questions that follow.
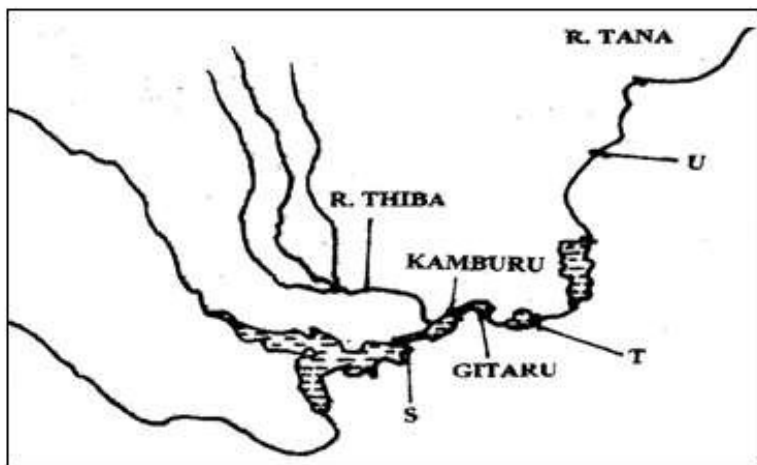


(i) Identify the hydroelectric power stations marked **S** and **T**. (2 marks)

(ii) Name the proposed hydroelectric power station marked **U** (1 mark)

(iii)State *three* physical factors that led to the establishment of seven forks hydroelectric power project along river Tana (3 marks)

(iv)What is the name of the multi-purpose hydroelectric power dam recently commissioned by the Ethiopian government on the Blue Nile? (1 mark)

(b) (i) Name *three* sources of green energy (3 marks)

(ii) Name *three* potential sites of geothermal power in Kenya. (3 marks)

(c) (i) Define biomass (2 marks)

(ii) State *four* causes of energy crisis. (4 marks)

(d) Explain *three* effects of power rationing in Kenya. (6 marks)

10. (a) Define the following terms:

(i) Census (2 marks)

(ii) Infant mortality rate (2 marks)

(b) (i) Explain *three* efforts taken by the Kenya government to reduce cases of infant mortality. (6 marks)

(ii) State *three* challenges the Kenyan Government faces in her effort to control the Covid-19 mortality in the country. (3 marks)

(c) (i) Using the table below calculate the inter-census numerical population increase (2 marks)

| Year | Total population |
|------|------------------|
| 1979 | 15,327,061 |
| 1969 | 10,942,705 |

(ii) Give the meaning of brain drain. (2 marks)

(iii)State *three* measures that the Kenya government should undertake to check on brain drain. (3 marks)

(d) (i) Name *two* Scandinavian countries with slow population growth. (2 marks)

(ii) Give *three* measures taken by the above countries to increase their population growth (3 marks)

# PANGANI GIRLS

**PAPER 1**
**SECTION A**                  **25MARKS**
Answer all the questions in this section.

1.    a )      Name two branches of geography.              (2marks)
      b)      Give three reasons why it is importance to study geography.   (3marks)
2.    a )      What is the solar system?                 (2 marks)
      b )      State three characteristics of sima crust        (3 marks)

3.     The diagram below shows a weather measuring instrument. Use it to answer the following questions.



     (a)      Identify the instrument                (1 mark)
     (b)      Describe how the instrument functions        (4 marks)

4.     a) Distinguish between volcanicity and  vulcanicity       (2marks)
       b) Give three intrusive volcanic features.           (3marks)
5      a) Define term rock                     (2marks)
       b) State three characteristics of minerals         (3marks)

## Section B (75 marks)
## Answer Question 6 and any other two.

6.    (a) Study the map  of  Kijabe 1: 50,000  provided and answer the following questions:
    (i) What is the approximate height of the top of Kijabe hill?          (1 mark)

    (ii) Measure the length of Nairobi – Naivasha railway line from Landhies (grid Reference   257978) to the level crossing near Kijabe station (grid reference 308984). Give your    answer in kilometers.
        (2 marks)

   (iii) Give the longitudinal extend of the map extract.          (1 mark)

    (b)   i) Find the bearing of the cattle dip at Kenton from the pump house near the hot springs
                                (2 marks)

  ii) Name two types of the scales on the map extract.          (2 marks)

  iii) Give two functions of Kijabe Township.          (2marks)

  (c)  Identify the vegetation of the area covered by the map          (4 marks)

(d)  Explain how relief has influenced the distribution of settlement in the area covered by the map.
                                                      (6 marks)
 (e) i)  Draw a rectangle measuring 14cm by 10cm, to represent the region enclosed by Easting's 24 and 31 and northings 96 and 01.                              (2marks)
    ii) On the rectangle identify and mark the following features.
            -    Railway line.                                        ( 1mark)
            -    Regional boundary.                                   ( 1mark)
            -    School                                               (1 mark)

7.      i)        Define the term faulting.                          (2marks)

        ii)       Name two types of faults.                          (2marks)
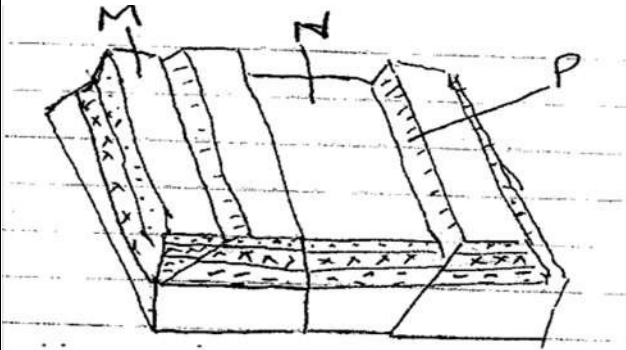
        iii)      Use the diagram below to answer the question that follows:-



   a)   Name the features marked M, N and P                          (3marks)

   b)  With well labelled diagrams explain the formation of the Rift valley through tensional forces.
                                  (8marks)
   c)  Explain five positive effects of faulting.                    (10marks)
8. (a) State four physical factors that contribute to development of deserts.
                                                      (4 marks)
 (b) Give four characteristics of  hot desert landscape.            (4 marks)

 (c) Explain three factors that influence wind transport in the desert.     (6 marks)

 (d) Describe how a deflation hollow is formed.                     (4 marks)

 (e) You carried out a field study in a desert landscape.

 (i) State four preparations for your study.                        (4 marks)

 (ii) List three water depositional features you identified.        (3 marks)

9. (a) (i) Define the term glaciation. (2 marks)

   (ii) Name three types of moraines. (3 marks)

 (b) Describe how the following features found in upland glaciated landscapes are formed.

   (i) Glacial through (4 marks)

   (ii) Pyramid peak. (6 marks)

 c) Explain three significance of upland glaciated features to human activities. (6 marks)

 (d) Suppose you were to carry out a field study of glaciated lowland.

   (i) State two advantages of using oral inter views to collect information during the field study. (2 marks)

   (ii) Name two features found in glaciated lowlands that you are likely to study. (2 marks)

10.    (a)    Differentiate between soil texture and soil structure.    (2 marks)

(b)    (i)    Apart from organic matter, name four other components of soil.
                                                              (4 marks)

    (ii)    State four ways in which humus contributes to the quality of soil.          (4 marks)

     (iii)   Explain how the following farming practices may result to loss of soil       fertility.

•      Continuous irrigation                                          (2 marks)

•      Overgrazing                                                    (2 marks)

•      Over cultivation                                              (2 marks)

(c)    Give three soil forming processes                              (3 marks)

(d)    Explain three ways in  which natural vegetation may prevent soil from erosion.
(6 marks)

# PAPER 2
## SECTION A

*Answer ALL the questions in this section*

1.    a) Give three major areas studied in Human and Economic geography          (3mks)
      b) State how geography is related to agriculture                            (2mks)

2.     a) Give three reasons why it is necessary to study geography through fieldwork  (3mks)
      b) State two disadvantages of direct observation as a method of data collection (2mks)

3.   a) State three uses of Soda Ash                                    (3mks)

b) Name two areas where diamond is mined in South Africa                    (2mks)

4. a) identify two protective role of forest in Kenya                    (2mks)

   b) State three factors that lead to depletion of forests in Kenya.          (3marks

5. a) State three physical condition favouring the growing of cocoa in Ghana  (3mks)

   b) List two problems facing cocoa farming in Ghana                          (2mks

# SECTION B

*Answer Question 6 and any other two questions from this section.*

6.  The table below shows domestic consumption of dairy products in Kenya in millions kilograms between 2008 and 2011. Use it to answer questions that follows;

7.

| years Dairy products | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|
| Butter | 20,000 | 25,000 | 30,000 | 35,000 |
| Canned Milk | 15,000 | 30,000 | 25,000 | 20,000 |
| Cheese | 10,000 | 9,500 | 5,000 | 4,000 |
| Yoghurt junket | 2,000 | 4,000 | 5,000 | 9,000 |

a. i) Using a vertical scale of 1cm to represent 5000 million kilograms , draw Cumulative bar graphs to represent the data                                                                 (8mks)

   ii) Give three disadvantages of using cumulative bar graph to represent the data (3mks)

b. i) Name four dairy breeds kept in Kenya                                  (4mks)

   ii) State two differences between dairy farming in Kenya and Denmark          (4mks)

c. Explain three ways taken by the government of Kenya to improve dairy farming      (6mks)

7. a. i) Name two types of alluvial mining method                          (2mks)

   ii) Identify four factors that influence the exploitation of minerals in Kenya      (4mks)

   iii) Describe the shaft method of mining                          (6mks)

b. Explain three adverse effect of gold mining to the environment of South Africa      (6mks)

c. Your class intends to carry out a field study on gold mining site in Migori County in Nyanza region;

   i) Outline four ways in which the students would prepare for this field study      (4mks)

   ii) State three reasons why they would be required to conduct a reconnaissance      (3mks)

8. a. i) State three benefits of out grower schemes in growing of sugar cane in Kenya (3mks)

   ii) State three reasons why Kenya imports sugar sometimes                          (3mks)

b. i) State four physical conditions which favour large scale sugarcane growing in Kenya (4mks)

  ii) Describe the stages involved in the processing of sugarcane at the factory      (8mks)

  iii) Give three by – products obtained from sugar cane      (3mks)

c. State four problems facing sugar cane farmers in Kenya      (4mks)

  9. a. i) Give three methods used to drained swamps in Kenya      (3mks)

    ii) State four benefits that resulted from the reclamation of the Yala swamp      (4mks)

  b. i) What is a polder      (2mks)

   ii) Name three areas which make up the wider zuder zee reclamation project in the Netherland

(3mks)

  c. i) Name two methods of irrigation used in Kenya      (2mks)

   ii) State three importance of irrigation farming in Kenya      (3mks)

  d. State four differences between land reclamation in Kenya and the Netherland      (8mks)

  10. a. i) What is fish farming      (2mks)

    ii) State three reasons why marine fisheries are underdeveloped in Kenya      (3mks)

  b. i) describe the purse seining as a method of fishing      (6mks)

ii) State four ways in which the Kenyan government is promoting the fishing industry in the country

(4mks)

c. The world map below shows major fishing grounds of the world. Use it to answer the following questions;
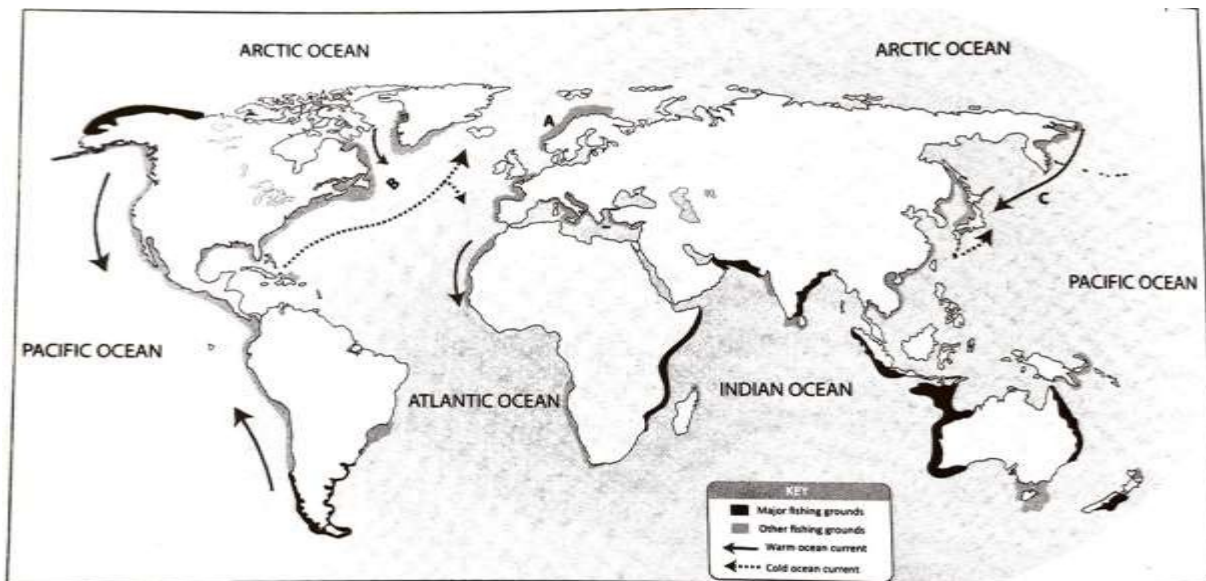


Name the fishing ground marked A and B      (2mks)

i)   Explain four factors that make the area marked C an important fishing ground      (8mks)

# ALLIANCE BOYS HIGH SCHOOL

**PAPER 1**

SECTION A

**Answer all questions in this section**             **(25 marks)**

1)      The diagram below represents structure of the earth.

a)      Use it to answer questions that follow.
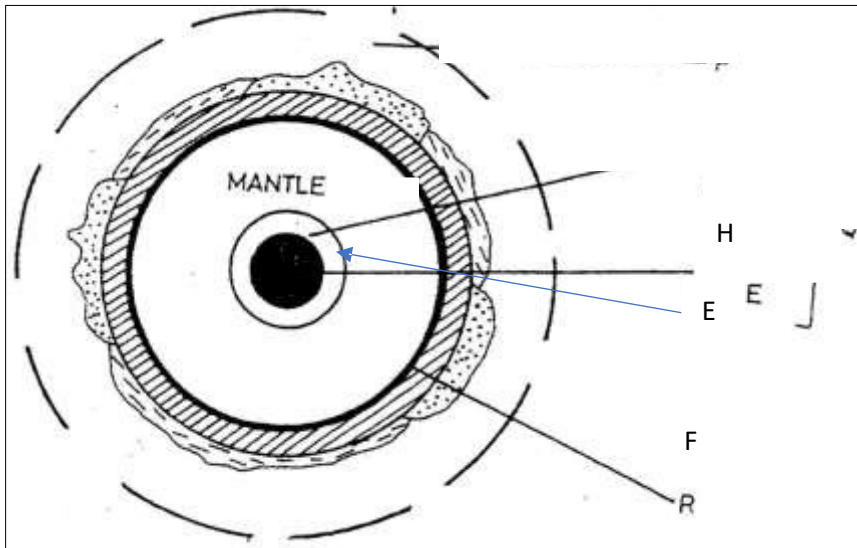


i)      Name the boundaries marked E and F.            (2 marks)

ii)      Identify **two** minerals that make up the layer marked H.      (2 marks)

b)      Give **two** effects of the rotation of the earth on its axis.      (2 marks)

2)a)      Define the term magmatic water            (2 marks)

b)      List **three** surface features on Karst landscape      (3 marks)

3).a)      Define the term vegetation            (2 marks)

b)      Explain how the following factors influence the distribution of vegetation

i)      Relief            (2 marks)

ii)      Soils            (2 marks)

4)      State **four** indicator of occurrence of sol creep in an area      (4 marks)

5) a) Name **two** types of submerged highland coasts      (2 marks)

b) Identify **two** resultant features of the emerged highland coasts      (2 marks).

**Section B. Answer question 6 and any other two. 75 marks**

Q.6 Study the map of **Kijabe** provided to answer the questions that follow.

(a) (i). Identify the tittle of the map provided.            (1 mark).

     (ii). Give the latitudinal extent of the map given.            (2marks)

(ii). Identify any **two** methods used to represent relief in the map provided.          (2 marks)

 (ii). Identify the feature in grid reference 402003.                              ( 1 mark)

b)(i). Determine the length of all-weather road bound surface from grid reference 2589 to the junction at petrol station in kilometers.                              (2 marks)

(ii). Identify **three** natural vegetation in the area covered by the map.                     (3marks)

(ii). Describe the drainage of the area covered by the map.                      ( 6 marks)

(c )(i). Explain **three** social activities found in the area covered by the map.               (6 marks)

(ii). Give **two** proofs that suggests lumbering is taking place in the area covered by the map.  ( 2 marks)

7. a) i) Give **three** reasons why weather forecasting is important                (3 marks)

    ii) State **three** conditions that lead to fog formation.                      (3 marks)

b) Explain how the following factors influence climate.

  i) Aspect                                                            ( 2 marks)

  ii) Altitude                                                          ( 2 marks)

  iii) Distance from the sea.                                              (2 marks)

c) Using a well labeled diagram, describe the formation of orographic rainfall.        (6 marks)

d)  i) State **two** advantages of studying weather through fieldwork.                (2 marks).

Students from Turuturu Secondary conducted a field study on weather in a weather station.           ii) Formulate a suitable hypothesis they could have used for the study.                     (2 marks)

iii) State **three** follow-up activities they would carry out after the study.              (3 marks)

8 a) Identify **three** ways in which ice moves.                          (3marks)

   b) Describe plucking as a process in glacial erosion.                      (4marks)

c) i) Using a well labeled diagram, describe the formation of a pyramidal peak.          (6marks)

 ii) Explain **three** factors that lead to glacial deposition.                     (6marks)

d) You are required to carry out a field study on erosional features in glaciated lowland area

     i) Give **three** reasons why you would require a working schedule              (3marks)

ii) Give **three**  erosional features in the lowland areas they would have identified. (3marks

9.a)i) A part from the Rift Valley name two other relief features that are formed as result of faulting. (2marks)

   ii)    With the aid of a well labeled diagram, describe how a Rift Valley is formed by tensional forces. (8marks)

 b)    Explain **four** effects of faulting                              (8marks)

c) Students are planning to carry out a field study of an area affected by faulting

 i)State **four** reasons why it is important for the students to have a pre-visit of the area.        (4marks)

ii)One of the ways they would use to collect data is through direct observation. Give three disadvantages of direct observation in the study of such an area. (3marks)

10. a) (i) Name **three** major deserts found in Africa (3 marks)

(ii) Give **two** processes in which wind erodes the earth's surface. (2 marks)

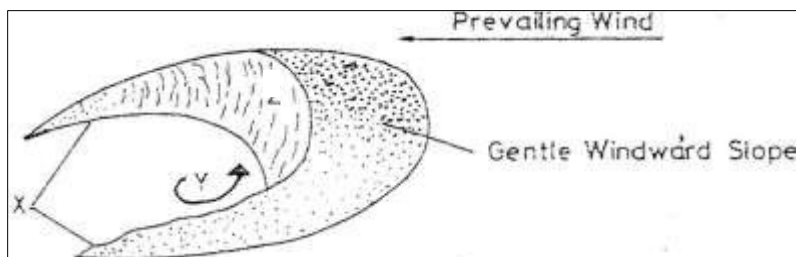(iii) Explain **three** ways in which wind transports its load. (6 marks).

b) Using well labeled diagrams, explain how the following desert features are formed;

(i) Yardangs. (5 marks)

(ii) Mushroom blocks. (6 marks)

c) The diagram below represents features resulting from wind deposition in a desert

Use it to answer questions that follow.



(i) Name the above feature (1 mark)

(ii) Name parts marked X and Y (2 marks)

**PAPER 2**

This paper consists of **two** sections A and B. Answer all questions in section A. In section B, answer question 6 and any other two.

1. a)Name **two** conditions that are necessary for the formation of petroleum. (2 marks)
   b) List **three** ways in which opencast mining affects the environment. (3 marks)
2. (a) What is soil conservation 2 marks
   (b) State **three** farming methods that assist in soil conservation. (3 marks.)
3. (a) Define the term transhumance. (2 marks)
   (b). State **three** areas in Temperate world where transhumance is practiced. (3 marks)
4.(a) State **five** characteristics of softwood forest in Canada. (5 marks)
5. The table below represents information on population change in Kenya by province between years 2000 and 2005.

| Province | Population in Millions | |
|---|---|---|
| | Years | |
| | **2000** | **2005** |
| Nairobi | 2.229 | 2.751 |
| Central | 3.882 | 4.038 |
| Coast | 2.662 | 2.927 |
| Eastern | 4.840 | 5.120 |
| North- Eastern | 1.054 | 1.438 |

| | | |
|---|---|---|
| Nyanza | 4.598 | 4.916 |
| Rift valley | 7.386 | 8.366 |
| Western | 5.532 | 3.885 |
| **Total** | **30.183** | **33.441** |

 

 

(a)     Which province had the highest change in population between 2000 and 2005?                     (2marks)

(b)     Calculate the percentage increase in population in Kenya between 2000 and 2005.                     (3marks)

Q.6Anwer question six and any other two.



(a)(i). Identify the type of photograph shown above.                   (2 marks)

 (ii). State **three** physical factors that may have caused the phenomenon shown in the photograph. (3 marks)

(iii). Identify the natural phenomenon taking place in the photograph.         (1 marks)

(iv). Name **three** areas in Kenya prone to the disaster shown in the photograph.    (3 marks)

b). (i) Draw a rectangle 15 cm by 12cm to represent the photograph above.       (2 mark)

    (ii). In the sketch, mark and name human being,

   (iii) settlements.

   (iv) Flooded areas

   (v) Ripples.

( vi). clouds

c). State **three** methods that can be used to minimize the occurrence of the phenomenon represented by the photograph.                                                                 (3 marks)

d.(i) Differentiate between land reclamation and land rehabilitation.                    (2 marks)

(ii). State **two** ways in which each of the following problems experienced in Mwea irrigation scheme can be solved.

- ❖   Low prices of rice.                                                                 (2 marks)
- ❖   Fluctuating water levels in the irrigation canals.                              (2 marks)

7. (a) What is mining.                                                                   (2 marks).

  b). Explain how the following factors influence occurrence of minerals.

   (i) Evaporation.                                                        (2 marks)

   (ii). Vulcanicity.                                                      (2 marks)

   (iii). Metamorphism.                                                   (2 marks)

(b) (i) Apart from deep shaft mining, name **three** other mining methods.       (3marks)

  (ii) Describe how shaft mining is carried out.                             (6marks)

  (c) Explain four ways in which mining contributes to the economy of Kenya.     (8marks)

8. (a)(i). What is mixed farming.                                                        (2 marks)

  (ii). Draw a sketch map of Kenya, and on it mark and name **three** areas where coffee is grown.

(4 marks).

(b)(i) State **three** physical conditions that favour coffee growing in the areas you have shaded.   (3 marks)

(ii). Name **two** new varieties of coffee grown in Kenya.                          (2 marks)

(c). Explain **four** ways in which the government of Kenya assist the small-scale coffee farmers.                                                                        (8 marks).

d). Your geography class carried out field study in a coffee farm near the school.

i)       State **four** methods the class may have used to collect data.              4 marks

ii)      During the field study the class collected data on quantities of coffee produced in the farm in the last

     five years.   State **two** methods the class may have used to present the data**.**

     (2 marks).

9. (a). Study the map of the world provided to answer the questions that follow. The world maps

indicate the major fishing ground.
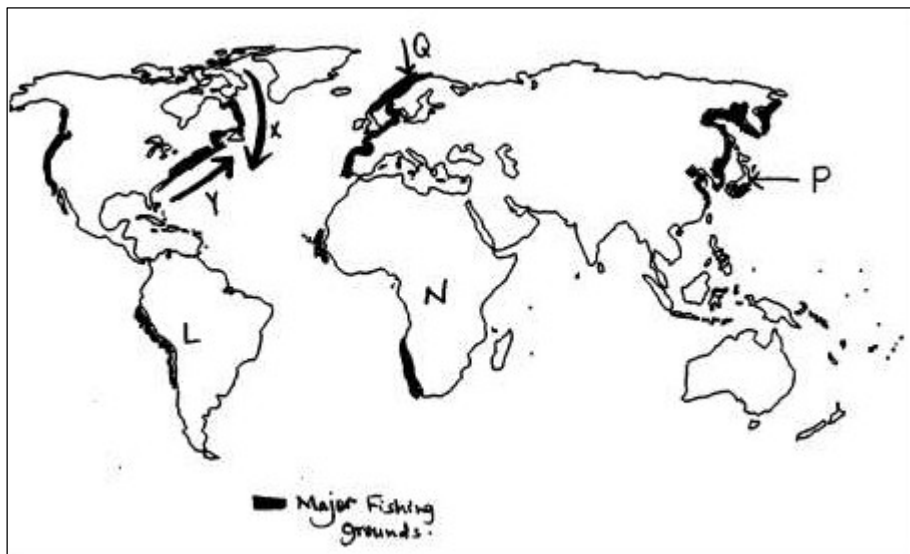
(i). Name the ocean current marked X and Y.                                      (2marks)
(ii). Name the continents marked L and N.                                        (2 marks).
(iii). Name the Countries marked P and Q.                                        (2 marks).
b). Apart from the ocean currents explain **four** other factors that influence fishing where two current meets.
(8 marks
c)Explain why in East Africa, fresh water fishing water in the area shaded on the map other than ocean currents.

(6marks)

d). (i). State **two** measures taken by Kenya government to conserve fisheries in Kenya. (2 marks)

   ii)  List **three** methods used to preserve fish.                           (3marks)
10. (a)(i). What is energy crisis?                                              (2 marks)
     (ii)Apart from water, give **two** renewable sources of industrial energy.      (2 marks)
The diagram below shows the occurrence of petroleum in the earths' crust Use it to answer question (a iii).
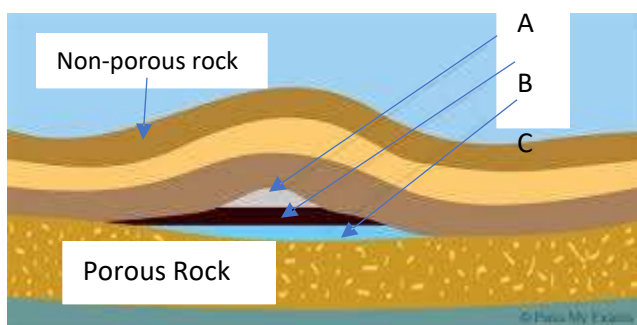


(iii). Name the substances labelled A, B, C.                                     (3 marks)
(b) Explain **four** benefits emanating. from rural electrification in Kenya.         (8 marks)
(c) (ii) Explain **three** effects that the increase in oil prices had on the economies of oil – importing countries of Africa.                                                        (6 marks)
(ii). State **four** ways in which Kenya can reduce the use of petroleum as a source of energy.   (4 marks)

PAPER 1
SECTION A
*Answer all questions in this section.*

1.  The diagram below represents the structure of the atmosphere. Use it to answer question (a)



**The Structure of the Atmosphere**
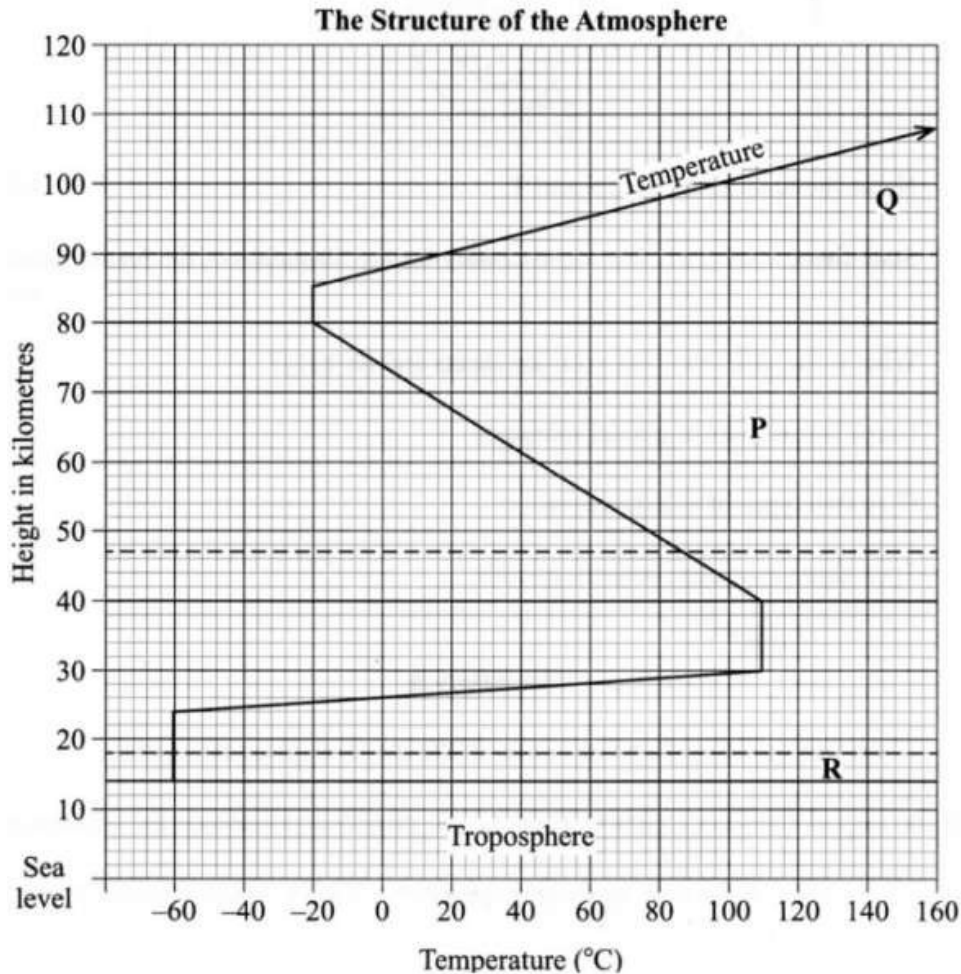
(a)Name:
(i) The parts marked P and Q.                                              (2mks)

(ii) The layers of discontinuity marked R.                                 (1mk)

(b) State two characteristics of the weather conditions in the troposphere.  (2mks)

2.  (a) What is a metamorphic rock?                                         (2mks)

(b) Give three examples of metamorphic rocks.                              (3mks)

3.  (a) What is an earthquake?                                             (2mks)

(b)Identify the scale used to measure:
    (i) The intensity of earthquakes;                                      (1mk)

(ii) The magnitude of earthquakes. (1mk)

4. (a)Identify the main characteristics of the ocean water. (2mks)

(b)Give three factors that influence wave deposition. (3mks)

5. (a)Name three features that make up the hydrosphere. (3mks)

(b)Explain how the movement of magma causes earth movement. (2mks)

# SECTION B
Answer **question 6** and any other **two** questions from this section

6. Study the map of Kijabe 1:50,000 provided and answer the following questions:
(i)What is the appropriate height of the top of Kijabe hill? (1mk)

(ii)Measure the length of Nairobi-Naivasha railway line from landhies (grid reference 257978) to the level crossing near Kijabe station (grid reference 308984).Give your answer in kilometers. (1mk)

(iii)What relief features on the map may have created problems in the construction of the railway line? (1mk)

(b)Describe the drainage of the area covered by the map. (4mks)

(c)Explain how relief has influenced the distribution of settlement in the area covered by the map. (4mks)

(d)Citing evidence from the map ,state four economic activities carried out in the area covered by the map. (8mks)

(e)Suppose you were a student n the school at Kinari (Kinale )and you plan to carry out a field study of Wakagwe forest,
(i)Design a working programme (schedule ) you would use during the day of the study. (2mks)

(ii)Give three reasons why it would be necessary to sample part of the forest for the study. (2mks)

(iii)State two ways in which your findings would be useful to the local community. (2mks)

7. (a)(i)What is a lake? (2mks)

(ii)Name two crater lakes in Kenya. (2mks)

(b)Describe how each of the following lakes are formed:
(i)corrie lake; (4mks)
(ii) oasis; (4mks)

(iii) lagoon (4mks)

(c)(i)Give three reasons why some lakes in Kenya have saline water. (3mks)

(ii)Explain how each of the following has affected lakes in Kenya:
- Deforestation (2mks)
- Industrialization (2mks)
- Water needs (2mks)

8. (a) (i)Name three types of faults. (3mks)

(ii)Apart from compressional forces, explain two other processes that may cause faulting
(4mks)

(b)With the aid of diagrams, describe how compressional forces may have led to the formation of the Great Rift Valley. (8mks)

(c)Explain three ways in which faults is of significance to human activities. (6mks)

(d) suppose you are to carry out a field-study on a faulted are
i) State two methods you would use to collect data. (2 mks)

ii) Name two features resulting from faulting you are likely to observe (2 mks)

9. The diagram below represents an artesian basin. Use it to answer question (a)
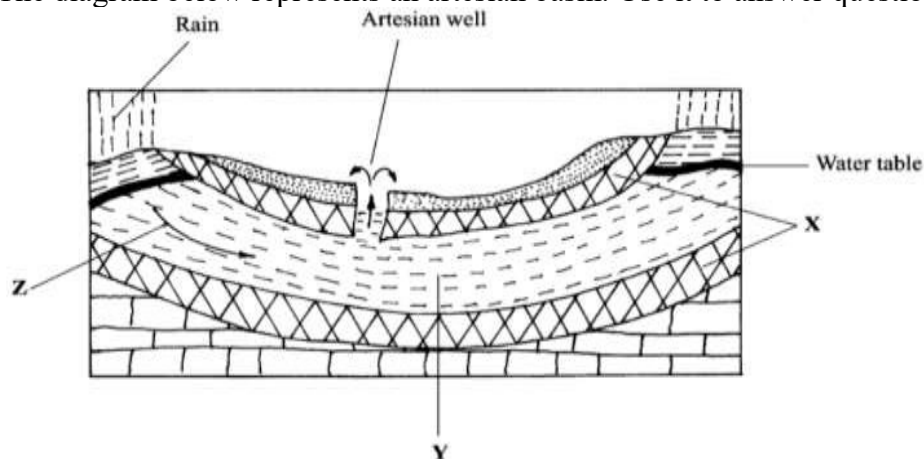


(a)Identify:
(i)the layers marked X and Y. (2mks)

(ii)the process marked Z. (1mks)

(b)Explain how the following factors influence the amount of underground water in limestone areas:
(i) rainfall; (4mks)

(ii) vegetation cover. (4mks)

(c)(i) Apart from stalagmites, name three other underground features formed in limestone areas. (3mks)

(ii) With the aid of a diagram, describe how a stalagmite is formed. (8mks)

(d) Give three reasons why there are few settlements in Karst landscapes. (3mks)

10. (a) (i) Name two major deserts found in Africa. (2mks)

The diagram below represents features resulting from wind erosion in desert. Use it to answer question a (ii).
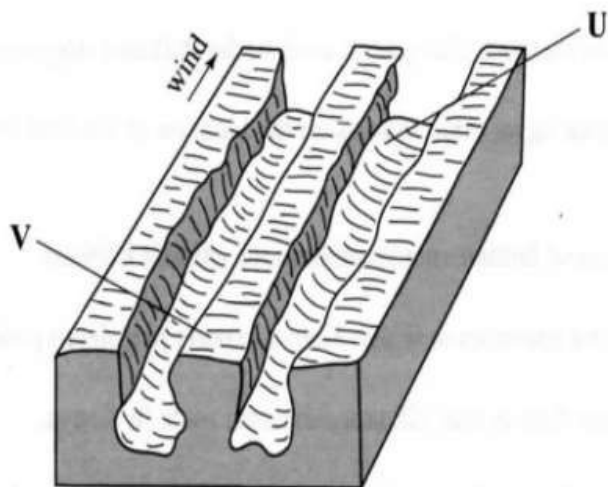


(ii)Name the features marked U and V. (2mks)

(b)Describe the three processes through which wind transports its load. (6mks)

(c)Using a well labeled diagram , describe how a barchans is formed. (7mks)

(d)Explain two ways in which desert features are of significance to human activities. (4mks)

(e) You intend to carry out a field studying an arid area.
    i) Name one drainage feature you are likely to see. (1 mk)

    ii) State three problems you are likely to encounter during the study (3 mks)

**PAPER 2**
**SECTION A**

**Answer all the questions in this section**
1.  a. Name two branches of Geography. (2mks)

    b. Outline three ways in which a student benefit from learning geography. (3mks)

2.  a. Define the term mining. (2mks)

    b. Describe Hydraulic mining as a method of mining. (3mks)

3.  a. List two factors that determine the distribution of forest in Kenya (2mks)

    b. Give three economic uses of mangrove forests. (3mks)

4.  a. Outline two biotic factors influencing agriculture. (2mks)

b. State three physical conditions that favour cocoa farming in Ghana. (3mks)

5.  a. Differentiate between management and conservation of the environment. (2mks)

b. Outline three measures being taken by people to reduce the impact of floods. (3mks)

## SECTION B

6.  Use the table below and answer the questions that follow in Narok County.

| Name of divisions | No. of veterinary officers |
|---|---|
| Mayasho | 300 |
| Gukaro | 150 |
| Zachocho | 200 |
| Mayayo | 160 |
| Kakasho | 110 |
| Ndikakho | 80 |
| Totals | 1000 |

i.  Calculate the percentage of number of officers in Kakasho division. (2mks)

ii. Draw a divided rectangle of 10cm long to represent the number of veterinary officer per division in Narok County. (10mks)

b. i. Give the four main Beef cattle breeds kept in Kenya. (4mks)

ii. State three physical factors encouraging beef farming. (3mks)

c. Outline six effort taken by Kenya government its support beef cattle farming. (6mks)

7. Below is a sketch map of the RUhr Industrial Region. Use it to answer questions. (i) (a)
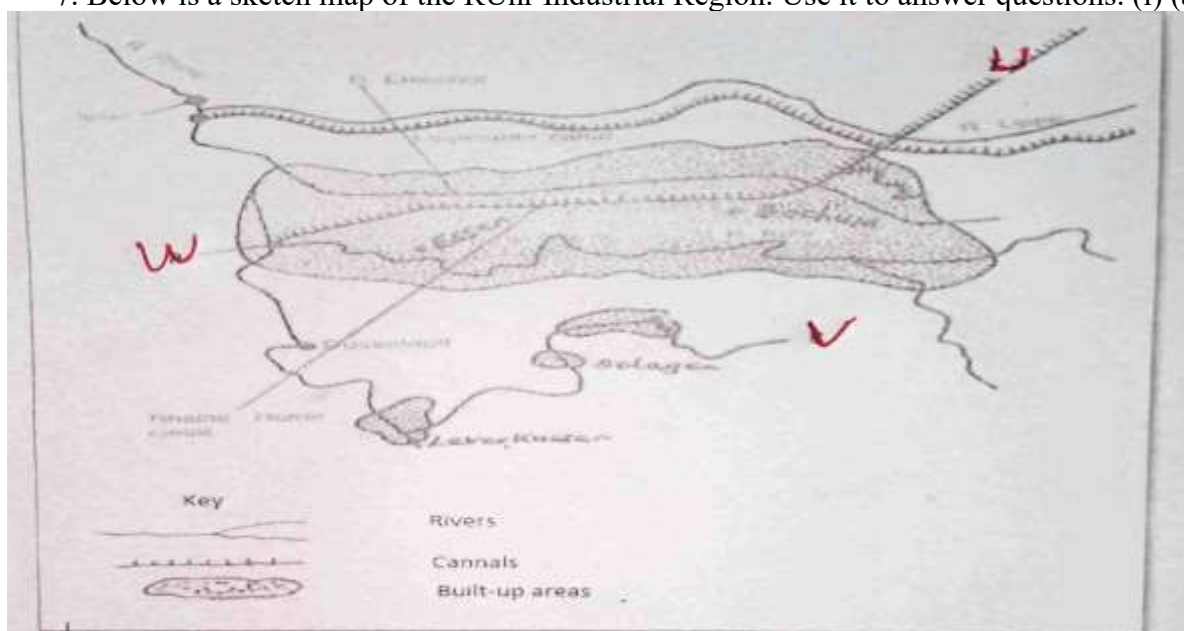


a. i. Name the canal marked U. (1mk)

ii. Name river marked V. (1mk)
  iii. Name the town marked W. (1mk)
b. i. What is Industrialization? (2mks)
ii. Name the towns in Kenya where each of the following industries are located.
     i.  Oil refining. (1mk)
     ii.  Paper manufacturing (1mk)
     iii.  Motor vehicle assembly. (1mk)

c. i. Explain three factors which influenced the location in iron and steel industry in the rural
    region in Germany. (6mks)
ii. Explain three factors which have favoured the development of car manufacturing industry in Japan.
(6mks)
d. You intend to carry out a field study of furniture making in the local (i) state three reasons why it
would be necessary for you to visit the area of study in advance. (3mks)
ii. For your field study you have prepared a working schedule. State three items you would include in
the schedule. (2mks)
8 a. Define the term Eco-tourism. (2mks)
b. i. Explain five reasons why Domestic tourism should be encouraged in Kenya. (10mks)
ii. State three problems facing tourism in Kenya. (3mks)
c. Explain how the following factors influence tourism in Switzerland.
i. Climate (2mks)
ii. Geographical location (2mks)
iii. Linguistic and plurality. (2mks)
d. Explain two reasons why Switzerland receives more tourists than Kenya. (4mks)
9a. i. Define balance of payment. (2mks)
ii. Identify three major exports from Kenya to European countries. (3mks)
b. Outline reasons why trade between Kenya and other African countries is not well developed.
(4mks)
c. Explain four reasons why a country should impose trade barriers. (8mks)
d. You intend to carry out field study in Nakuru Top Market.
i. Formulate the work schedule that you can use for the study. (4mks)
ii. State the follow up activities you are likely to undertake after the study. (4mks)
10. a. List three electric devices garget that relay through sound and pictures through the
    satellites. (3mks)
b. Explain two advantages of using the mobile phones. (4mks)
c. Outline four problems facing the mobile users. (4mks)
d .i.  List three trans-continental roads in Africa. (3mks)

ii. Explain three advantages of using road transport over railway transport. (6mks)

e. Describe factors which have led to the fast growth of Rotterdam as a major seaport in Europe.
(5mks)

PAPER ONE

## SECTION A

**Answer all the questions in this section.**

1. (a) What is a Land Breeze (2mks)
   (b) Give three ways in which sea breeze influence the adjacent land. (3mks)

2. State 5 characteristics of the mantle (5mks)
3. (a) Differentiate between magnitude and intensity of an earthquake. (2mks)
   (b) State three precautions which can be taken against earthquake destruction? (3mks)
4. (a) Give two causes of Ocean currents (2mks)
   (b) List three reasons why Oceans tend to heat more slowly than land masses. (3mks)

5. (a) What is humus (2mks)
   (b) State three ways through which humus improve the quality of a soil. (3mks)

## SECTION B
**Answer question 6 and any other two questions in this section.**
6. **You are provided with a map of Kijabe East Africa 1: 50,000(KENYA)  sheet 134/3, use it to answer the following questions.**

a) (i) Give the six figure grid reference of the trigonometrical station (2610m) (2mks)
   (ii) What is the general flow of River Gatamaiyu (2mka)

b) (i) measure the length of Nairobi-naivasha railway to the west of easting 27and east of easting 24 give your answer in kilometers .( 2mks)
   (ii)Citing evidence from the map, identify three social services offered in the area covered by the map (6mks)

c) (i) Explain three physical factors favouring cattle rearing in the area covered
        by the map. (6mks)
   (ii) Identify three physical features found at grid square 2695 (3mks)

d) (i) On the graph paper provided draw a rectangle measuring 12cm by 8cm to represent the area bordered by Easting 26 and  29 and northing 94 and 96 (2mk)

   (ii) On it mark and label

   • All weather road loose surface ( 1 mk)
   • Power line ( 1 mk)
7. (a) (i) State two processes of wind erosion in the desert areas (2mks)
   (ii) Give three reasons why wind action is effective in the hot deserts. (3mks)
   (iii) With aid of well labelled diagrams describe the formation of Yardangs. (7mks)
   (b) i)State two factors that influence the transportation of materials in the desert by wind (2mks)

   (ii)Give three processes through which wind transport materials in desert (3mks)

(iii)Name two features that are formed due to action of water in deserts. (2mks)

c) Explain three positive effects of desert landforms to human activities (6mks)

8. (a) i) List two effects of horizontal earth movements (2mks)
   (ii) Give three causes of earth movements (3mks)
   b) i) Name and describe three types of plate tectonic boundaries (6mks)

   (ii) Name three types of folds (3mks)

   c) With aid of well labelled diagrams, describe the formation of fold mountains (7mks)
   d) State four significance of folding to the human and physical environment. (4mks)
9. a)  Define the following term;
   i)    water table – (2mks)
   ii)   aquifer – (2 mks)
   b) Explain how the following factors influence the occurrence of underground water.

   **i)**   Nature of the rock (2mks)
   ii)    Gradient of the land (2mks)

   c)  State four conditions that are necessary for the formation of an artesian well (4mk)
   d) (i) Explain three conditions that are necessary for development of Karst Scenery (6mks)

      (ii) Give two reasons why there are few settlements in karst region (2mks)

   e) Students carried out a field study in a karst landscape.

   (i) State two methods they would have used to record data (2mks)
   (ii) State three importance of studying a karst landscape through field work. (3mks)

10. (a) i) What is ice sheet (2mks)
    (ii)Explain the reason why there are no ice -sheets in Kenya (2mks)
    b) Describe the formation of a pyramidal peak. (5mks)
    C) i) Name three types of moraine (3mks)

    (ii) Explain four effects of glaciated features in upland areas. (8mks)
    d) Students from a school near Mt. Kenya were planning to carry out a field study
    on the glaciated features on the mountain
    i) Give three reasons why it would be difficult to undertake the field study on glaciated
    features on the mountain (3mks)
    ii)Highlight two methods of collecting data they would have used (2mks)

**PAPER TWO**
## SECTION A: 25 MARKS

**Answer all the questions in section A.**

1.   a)  State two differences between a national park and a game reserve.( 2 mks)

     b)   State three importance of domestic tourism.( 3mks)

2.   a)  Name two tree species of coniferous forests.( 2mks)

b)        Give three characteristics of tropical hardwood forests that hinder their exploitation. (3mks)

3.    a)        Outline three problems facing wheat growing in Canada.( 3 mks)

      b)        List two exotic beef cattle reared in Kenya.   (2 mks)

4.    a)        Differentiate renewable and non-renewable source of energy.( 2mks)

      b)        State three problems experienced due to over-dependence on petroleum oil (3mks)

5.    a)        Name two types of manufacturing industries in Kenya.( 2 mks)

      b)        State three problems facing jua-kali industries in Kenya (3mks)

## SECTION B: 75 MARKS

### *ANSWER QUESTION 6 AND ANY OTHER TWO*

6.   The table below shows crop production in Kenya for a period of five years in 1000 kilograms. Use it to answer question (a)

| CROP/YEAR | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|
| Coffee | 1000 | 900 | 800 | 700 | 800 |
| Tea | 700 | 700 | 600 | 680 | 600 |
| Cotton | 500 | 400 | 300 | 600 | 350 |
| pyrethrum | 300 | 200 | 300 | 440 | 450 |

 (a) (i)  Using a scale of 1 cm represent 200 kilograms present the above data using a compound bar graph.(9 marks)

   (ii) List two advantages of using a compound bar graph to represent statistical data. (2 marks)

 (b)    (i)Other than Port harcout, name other towns associated with oil palm growing in Nigeria .(2 Marks)

   (ii) State three physical conditions that favor the growth of oil palm in Nigeria. (3 marks)

 (c) Describe the cultivation of oil palm from land preparation to harvesting.        (6 marks)

 (d) Give three uses of palm oil.                                                    (3 marks)

7.       The world map below shows the major fishing grounds

(a) Name the

   (i) Ocean currents marked P and Q                               (2mks)

   (ii) **Three** types of fish caught at the coast of Canada        (3mks)

(b) Explain how the following factors favour fishing in Japan

  (i) Ocean current                                         (4mks)

  (ii) Nature of the coastline                             (4mks)

  (iii) Level of technology                                (2mks)

(c) Describe how purse seining method is used in fishing        (7mks)

(d) Give three methods used to preserve fish             (3mk)

8. The table below shows the quantity of mineral produced in Kenya in tones between years 2001 and 2005.

   Use it to answer questions a(i) and (ii).

| Mineral / Years | 2001 | 2002 | 2003 | 2004 | 2005 |
|---|---|---|---|---|---|
| Soda ash | 297780 | 304110 | 352560 | 353835 | 360161 |
| Fluorspar | 11885 | 85015 | 80201 | 117986 | 109594 |
| Salt | 5664 | 18848 | 21199 | 31139 | 26595 |
| Others | 6093 | 7000 | 4971 | 6315 | 8972 |

**Source: Economic Survey, 2006.**

i)     Calculate the average production of soda ash over five year period.    (2 Marks)

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

iii)    Give **three** uses of soda ash.                               (3 Marks)

b) i)     Name the main places in Kenya where the following minerals are mined: -

a) Flourspar

b) Titanium

c) Gold                                                                                                    (3 Marks)

ii)     State **two** problems associated with shaft mining.                      (2 Marks)
c)  Explain **four** ways in which gold mining has contributed to the economy of South Africa.     (8 Marks)
d)     Explain **three** negative effects of mining on the environment.            (6 Marks)
9. (a) i) Apart from geothermal power, name three other renewable sources of energy in Kenya
                                                                                        (3mks)
  ii. State four factors that limit exploitation of geothermal power in Kenya                          (4mks)
 (b). i. Give three factors considered when setting up an hydroelectric power generating plant      (3mks)
 ii. List three advantages of electricity over other sources of energy                            (3mks)
c)i) What is energy crisis                                                                (2mks)
 ii. Give two causes of energy crisis                                                       (2mks)
d. Explain four effects of energy crisis to the economy of a developing country             (8mks)
10. Below is a sketch map showing Lake Victoria.  Use it to answer question (a)
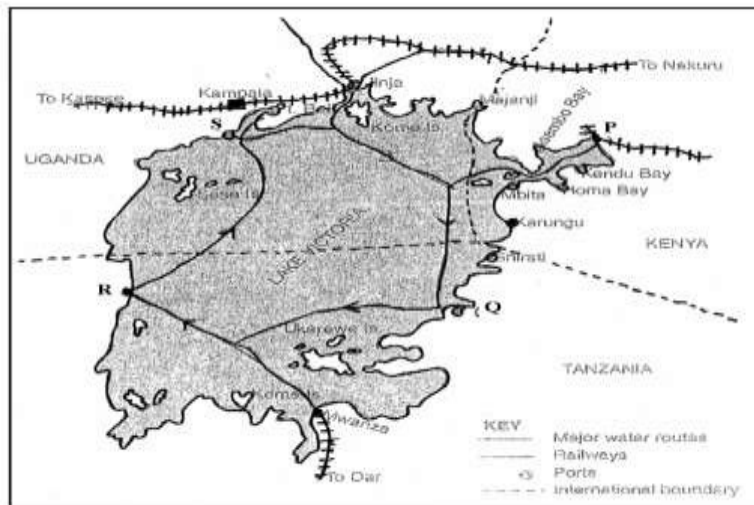


a)  i)  Name the ports marked P, Q, R, S                                                      (4mks)
     ii)  Give **four** advantages of air transport over water transport.                      (4mks)
b)     i)   Name three types of communication.                                             (3mks)

     ii)  Explain **four** problems facing transport and communication in Africa.(8mks)

c)     Explain the role of the Great Lakes and St. Lawrence Seaway to the economies of Canada
         and the USA.                                                                (6mks)

# MASENO SCHOOL

**PAPER 1**

## SECTION A
## Answer ALL questions in this section

1. Explain the **two** relationships between geography and physics. (4 marks)

2. State **five** proofs that the earth is spherical. (5 marks)

3. a) What is an air mass. (2 marks)

   b) Give **four** characteristics of the intertropical convergence zone (ITCZ) (4 marks)

4. a) Differentiate between hot springs and geysers. (2 marks)

   b) State **three** ways by which calderas may be formed. (3 marks)

5. a) What is green house effect. (2 marks)

   b) Give three gases contributing to green house effect. (3 marks)

## SECTION B

**Answer question 6 and ANY OTHER TWO questions in this section**

6. a) Study the map of Busia 1:50,000 (sheet 101/1) provided and answer the following questions.

   i) What is the title of the map? (1 mark)

   ii) Give the height of the highest point in the area covered by the map. (2 marks)

   iii) Calculate the latitudinal extend of the area covered by the map. (2 marks)

   iv) Identify **three** human made features on grid square 3836. (3 marks)

   b) Citing evidence, give **three** economic activities carried out in the area covered by the map. (3 marks)

   c) Explain **four** reasons why the region to the west of easting 27 is densely settled. (8 marks)

   d) Describe the drainage of the area covered by the map. (6 marks)

7. a) Differentiate between river capture and river rejuvenation (2 marks)

   b) i) State **three** factors which facilitate river erosion. (3 marks)

   ii) Name two types of deltas (2 marks)

   c) With the aid of well labelled diagrams, describe how ox-bow lakes are formed. (8 marks)

   d) i) What are rivers braids. (2 marks)

   ii) Describe **four** processes through which a river transports its load. (8 marks)

8. a) What is natural vegetation? (2 marks)

   b) i) Give the type of grassland vegetation found in the following countries.

   - New Zealand

   - Argentina

   - South Africa.

ii) Describe the characteristics of tropical rainforests vegetation. (6 marks)

c) Explain **four** uses of mountain vegetation. (8 marks)

d) You are to carry out a field study on the forest vegetation around Mau region.

i) State **two** reasons why6 it is necessary to have route map. (2 marks)

ii) Give **two** reasons why you need a tape measure. (2 marks)

iii) Identify **two** challenges you might encounter during the course of the field study. (2 marks)

9. a) i) What is a soil. (2 marks)

ii) Give **three** components of soil. (3 marks)

b) The diagram below shows different layers of soil. use it to answer question b(i), (ii), (iii)
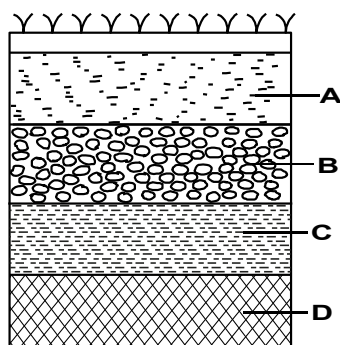


i) Name the soil layers B,C,.D (3 marks)

ii) Give two main processes of soil formation which takes place in horizon A. (2 marks)

iii) State four characteristics of soil in horizon B. (4 marks)

c) Explain how the following helps in maintenance of soil fertility and quality.

- Crop rotation (2 marks)

- Mixed farming (2 marks)

- Bush fallowing (2 marks)

d) State five significance of soils to human activities. (5 marks)

10. a) What is a lake. (2 marks)

b) i) Name two saline lakes within the Rift valley of Kenya. (2 marks)

ii) Explain four reasons why some lakes within the R.Valley have fresh water. (8 marks)

c) Explain three negative significance of lakes to human activities. (6 marks)

d) Form three students of Butuk secondary school carried out a field study around lake Victoria .

i) Name the type of breeze they most likely experienced. (1 mark)

ii) Give two economic activities

iii) State two methods they used in recording data. (2 marks)

## PAPER 2

### SECTION A.

*Answer all the questions in this section*
1. (a) Name two breeds of dairy cattle reared in Kenya. (2mks)
   (b) State three factors which favour dairy farming in Denmark. (3mks)

2. (a) State three physical factors which influence the location of settlements. (3mks)
   (b) Use the sketch map below to answer questions (i) and (ii)
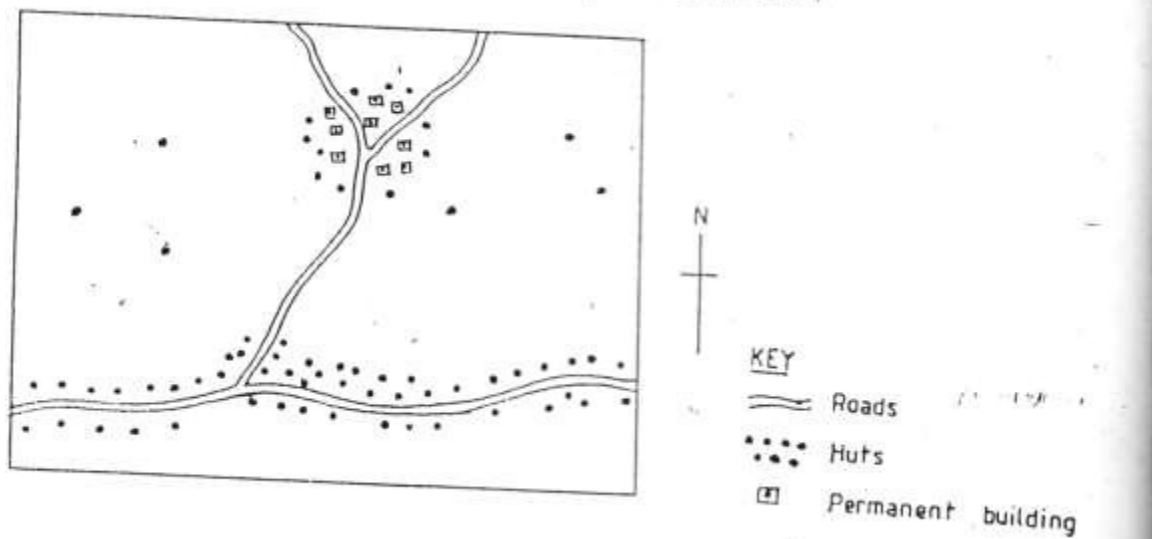


Name the main settlement pattern in
   (i)    the northern part of the area represented by the map. (lmk)
   (ii)   the southern part of the area represented by the map. (1mk)

3(a) State three reasons why marine fisheries in Kenya are underdeveloped. (3mks)
   (b) State three ways through which fish farming contributes to the economy of Kenya. (3mks)

4(a) Name two conditions that are necessary for the formation of petroleum. (2mks)
   (b) List three ways in which open-cast mining affects the environment. (3mks)

5. State four factors that have influence the development of industries in Eldoret town (4mks)

### SECTION B
**Answer question 6 and any other two questions in this section**
6. The table below shows the various modes of transport used by tourists visiting Kenya between the years 2006 and 2009. Use it to answer the following questions.

| Mode of transport | YEARS | | | |
|---|---|---|---|---|
| | **2006** | **2007** | **2008** | **2009** |
| Road | 100,000 | 50,000 | 150,000 | 200,000 |
| Air | 600,000 | 650,000 | 700,000 | 800,000 |

| Water | 200,000 | 150,000 | 100,000 | 50,0000 |

(a) i) Calculate the percentage increase in the number of tourists between year 2008 and 2009.     (3mks)

ii) Draw a compound bar graph to represent the data use the scale 1cm rep. 100,000 tonnes.     (8mks)

(b) (i) Explain any four roles played by transport in the economy of Kenya.     (8mks)

(ii) State two problems that face the construction of trans-continental highway in Africa.

(2mks)

(c) Students from your class visited Kisumu airport for a field study

i)     Identify two methods they used to record their data     (2mks)

ii)     Give two follow up activities they engaged in     (2mks)

7. (i) What is industrialisation.     (2mks)

(ii) Name a town in Kenya where each one of the following industries are located
i)     Oil refining.     (1mk)
ii)     Paper manufacturing.     (lmk)
iii)     Motor vehicle assembly.     (lmk)

(b) Explain four factors which influenced location of iron and steel industry in the Ruhr region of Germany. (8mks)

C(i) Give five reasons why development of Jua kali industry is encouraged in Kenya (5mks)
ii) Apart from Jua Kali industry give three other categories of manufacturing industries in Kenya. (3mks)

d) State four negative effect of industrialisation to a country.     (4mks

8(a) Name four sources of electric power apart from water.     (4mks)
(b) (i) State four factors that favoured location of hydro-electric power plants along river Tana.  (4mks)

(iii)     Explain four ways in which Kenya has benefited from development of seven folks hydroelectric power scheme.     (8mks)
C(i) Give three disadvantages of coal as a source of power.     (3mks)
ii) Explain three problems Kenya face as a result of overdependence on petroleum. (6mks)
9(a) What is meant by overpopulation.     (2mks)
(b) How does Kenya population differ from Sweden's.     (4mks)
c) Explain four factors that influence population distribution in Kenya.     (8mk)
d(i) Apart from rural rural migration, list three other types of migrations in Kenya. (3mks)
(ii) Explain four causes of rural-rural migration.     (8mk)
10(a) (i) State four physical factors favouring beef farming in Argentina.     (4mks)

(ii) Give four characteristic features of beef farming in Argentina.     (4mks)

(b) A form 3 class carried out a field study on a beef farm in   Narok:

(i) Give three ways in which they prepared for the study.     (3mk)

(ii) Name three types of beef breeds they identified.     (3mks)

(iii) Give three benefits derived from studying beef farming in a field study.     (3mks)

c. Explain four problems facing beef farming in Kenya.     (8mks).

# NAIROBI SCHOOL

**PAPER 1**

**SECTION A**

**ANSWER ALL QUESTIONS IN THIS SECTION**

1ai. What is a galaxy? (2m)

ii. _____ is a branch of Physical Geography that deals with landforms. (1m)

b. How does Geography encourage time management? (2m)

2a. The diagram below shows a volcanic feature. Study it and answer the    questions that follow.



i. Identify and name the feature. (1m)

ii. Name the parts marked **Q and R**. (2m)

b. Differentiate between a laccolith and a sill. (2m)

3a. what does the term 'mixed stand of trees' mean when describing characteristics of vegetation. (2m)

b. State three examples of temperate grasslands and where they are found. (3m)

4a. Differentiate between steam fog and orographic fog. (2m)

b. Identify and name three types of cold climate. (3m)

5a. identify and name two types of chemical weathering. (2m)

b. State three significances of weathering. (3m)


**SECTION B**

**ANSWER QUESTION 6 AND ANY OTHER TWO QUESTIONS FROM THIS SECTION**

**6. Study the map Busia sheet 101/1 1:50000 provided and answer the questions that follow**.

i) Give the magnetic declination of the map . (1mk)

ii) Identify one human feature in grid square 3533. (1mk)

iii)  Give six-grid reference of the chief's house near Funyula market (2mks)

iv) Give the height of Busenda Hill.(2mks)

v) Find the direction and bearing of Bujuimba School from Odiado market. (3mks)

b) Describe the relief of the area covered by the map. (4mks)

c) Reduce by half the area enclosed by easting **27** and **34** and northing **30** and **38.** (3mks)

On it mark and name

- Riverine trees (1mk)
- Air photo principal point(1mk)
- all weather road bound surface C526(1mk)
d) Citing evidence from the map, explain three factors influencing trade in the area covered by the map. (6mks)

Q7. a) i) What is a limb in a fold? (2mks)

ii) Explain how Fold Mountains are formed according to convectional theory (3mks)

b) i) Differentiate between orogeny and orogenesis (2mks)

ii) State three factors influencing folding of sedimentary rocks. (3mks)

c) i) Use the world map provided and answer the questions that follow.



Name mountain ranges marked **U, V, W, X, Y and Z** (6mks)

ii) Draw a well labeled diagram of anticlinorium and synclinorium (3mks)

d) Explain three ways in which fold mountains influence climate in a region. (6mks)

Q8ai. Define endogenic processes. (2m)

ii. State three causes of earth movements. (3m)

bi. Apart from the jigsaw fit of continents name three evidence that support the continental drift theory. (3m)

ii. According to the plate tectonics theory explain what happens along the compressional boundary. (6m)

c. Below is a diagram showing a plate boundary. Study it and answer the questions that follow.
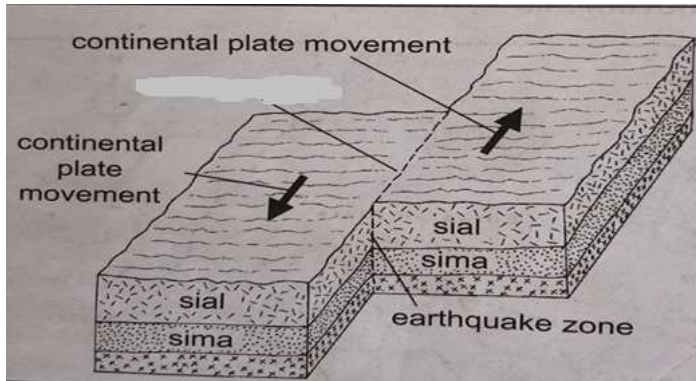


i. identify and name the type of boundary. (1m)

ii. Give an example of such a boundary. (1m)

iii. State three negative effects of movement along the boundary on the human environment. (3m)

d. Explain three positive significance of plate tectonics. (6m)

Q9ai. Define the term coast. (1m)

ii. The diagram below shows some relief features of the ocean floor, study it carefully and use it to answer the questions that follow
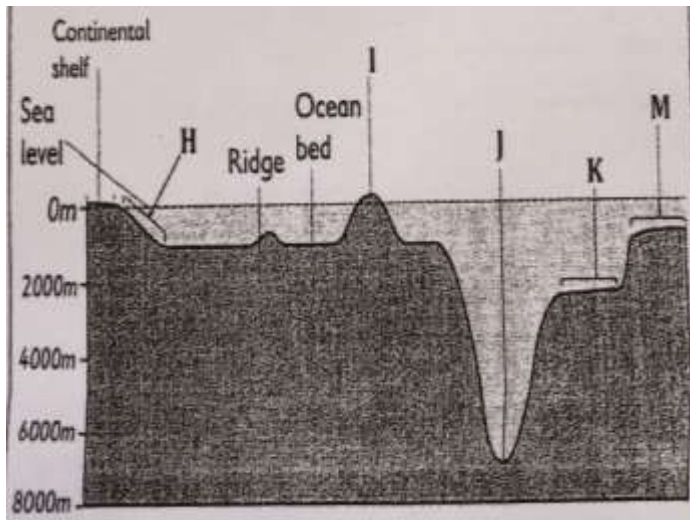


ii. Identify the features labelled **H, I and J.** (3m)

b. Name three processes by which coasts erode. (3m)

c. With aid of well labelled diagrams, explain how an Atoll is formed. (5m)

d. The diagram below represents a coastal landscape. Identify the features marked **K, L M**. (3m)
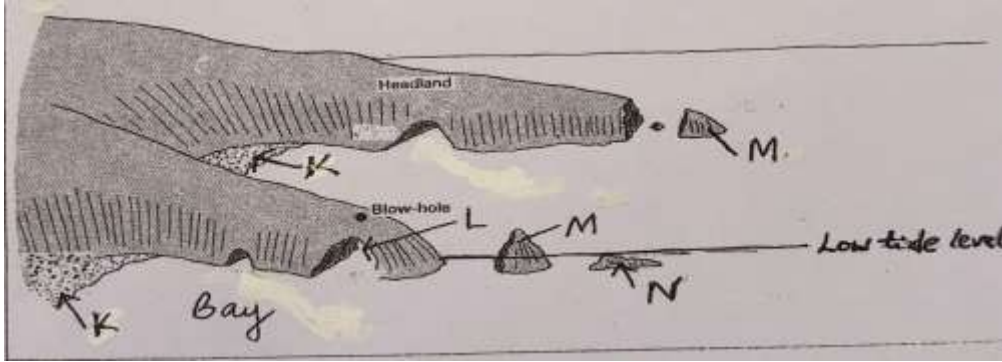


e. Form 4 students form a school carried out a field study on coastal features found along the coast of Kenya

i. Name three features as a result of coastal emergence that they are likely to have studied. (3m)

ii. State three methods the students used to record their data. (3m)

iii. Describe two ways in which features resulting from coastal submergence are of significance to Kenya. (4m)

10. a) i) Name three types of glacier. (3mks)

ii) State three factors influencing ice movement. (3mks)

b) Explain two processes of glacial erosion. (4mks)

ii) Draw a well labeled diagram of a crag and tail. (3mks)

c) With aid of a well labeled diagram, explain the processes involved in formation of a corrie lake. (5mks)

d) Students from a school went out for a field study on glaciation on Mt. Kenya.

i) Give two reasons why they would need a route map. (2mks)

ii) State three methods they are likely to use to collect data during the field study. (3mks)

ii) What two problems are the students are likely to encounter during the study. (2mks)

**PAPER 2**

**SECTION A**

Answer **all** the questions in this section.

1. (a) (i) Define Geography.                                                                     (2 mark)

     (ii) Name **two** branches of Geography                                          (2 marks)

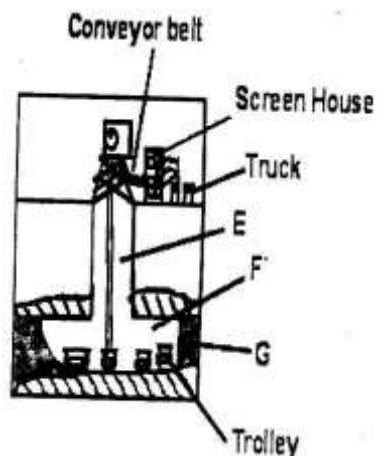   (b) State **two** reasons why it is important to study Geography.        (2 marks)

2. (a) Name **two** breeds of dairy cattle reared in Kenya.                    (2 marks)

   (b) State **two** factors which favour dairy farming in Denmark.         (2 marks)

3. (a) State **two** physical factors which influence the location of settlements. (2 marks)

4. The diagram below shows shaft mining.



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

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

(b) State **two** factors which influence the occurrence of minerals. (2 marks)

*Joint Mock Examination, 2021* **Turn over**

5. (a) (i) Define the term eco-tourism. (2 marks)

(ii) Name **two** tourist attraction found in the Rift valley province of Kenya. (2 marks)

(c) Give **two** reasons why domestic tourism is being encouraged in Kenya. (2 marks)

**SECTION B**

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

6. Study the table below that shows crop production in Kenya between 1978 and 1982 and

answer question (a).

| CROP/YEAR | 1978 | 1979 | 1980 | 1981 | 1982 |
|-----------|------|------|------|------|------|
| Coffee | 1000 | 990 | 870 | 850 | 840 |
| Tea | 750 | 700 | 650 | 700 | 600 |
| Pyrethrum | 300 | 250 | 350 | 400 | 450 |
| Cotton | 500 | 450 | 550 | 600 | 350 |

| Others | 550 | 300 | 300 | 350 | 300 |
|--------|-----|-----|-----|-----|-----|

**Crop production in 000' kilograms**

(a) (i) Draw a divided bar 15cm long to represent the crop production in Kenya in 1978.

(8 marks)

(ii) Calculate the percentage decrease in tea production between 1978 and 1979.   (2 marks)

(b) (i) Name **two** research stations that produce maize in Kenya.                (2 marks)

(ii) Name **two** common pests that attack maize in Kenya.                (2 marks)

(c) Describe how the following conditions influence the growing of maize;

  **Topography**                                                          (3 marks)

  **Soils**                                                               (3 marks)

(d) Describe the processing of maize in Kenya.                            (5 marks)

  7. (a) (i) What is Agroforestry?                                        (1 mark)

(ii) Give **four** reasons why afforestation is being encouraged in Kenya.    (4 marks)

(b) (i) List **two** factors that determine the distribution of forests in Kenya.    (2 marks)

(ii) Give **two** economic uses of mangrove forests.                     (2 marks)

(c) (i) Compare forestry in Canada and Kenya under the following sub – headings.

  Tree harvesting.                                                        (2 marks)

  Transportation of logs.                                                 (2 marks)

(d) Explain **three** problems that affect forestry in Canada.           (6 marks)

(e) You are supposed to carry out a field study on Agroforestry in the area around your  school.

  (i) State **three** reasons why it would be necessary to visit the area before the day of the
     study.                                                              (3 marks)
(ii) Give **three** significance of agroforestry you are likely to identify during the study.
                                                                         (3 marks)
8. (a) (i) A part from draining swamps, state **two** other methods  used in reclaiming land in Kenya.
(2 marks)

(ii) State **three** benefits that resulted from reclamation of the Yala swamp.    (3 marks)

(b) (i) Draw a map of Kenya;                                             (2 marks)

(ii) On the map drawn, locate the following;

**Perkerra irrigation scheme** (1 mark)

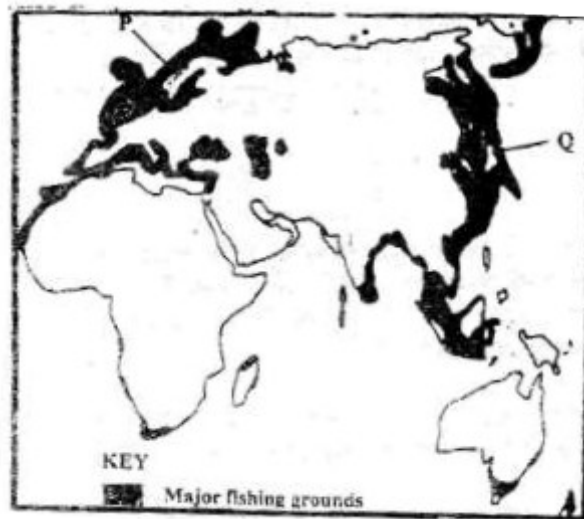**Mwea Tebere irrigation scheme** (1 mark)

**River Tana** (1 mark)

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

(d) Explain **four** benefits of land reclamation in the Netherlands. (8 marks)

9. The map below shows some major fishing grounds in the world. Use it to answer question (a)



(a) (i) Name the countries marked **P** and **Q**. (2 marks)

(ii) Name **one** types of fish caught along the west coast of country **Q**. (1 mark)

(iii) Name **two** methods of fishing used in the shaded areas. (2 marks)

(iv) Explain **three** conditions that favour fishing in the shaded coastal waters. (6 marks)

(b) Explain **four** ways in which marine fisheries in Kenya can be conserved. (8 marks)

(c) Explain **three** problems experienced by fishermen while fishing in Lake Victoria.
(6 marks)

10. (a) Define the following terms;

overpopulation (1 mark)

optimum population (1 mark)

(b) How does Kenya's population differ from that of Sweden? (4 marks)

(c) The population pyramid below represents the population structure of a country.
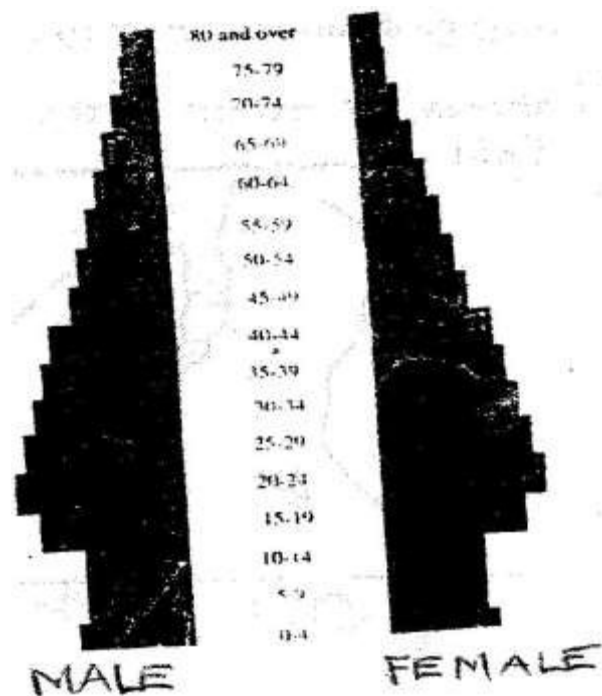


Describe the characteristics of the population as represented by the pyramid.        (4 marks)

(d) Explain **four** factors that influence population distribution in Kenya.                (4 marks)

(e) (i) A part from rural – rural migration, list **three** other types of migrations in Kenya. (3 marks)

(ii) Explain **four** causes of rural – rural migration in Kenya.                            (8 marks)

PAPER 1
SECTION A

*Answer **ALL** the questions in this section*

1. The diagram below shows the internal structure of the earth. Use to answer question (a) and (b).
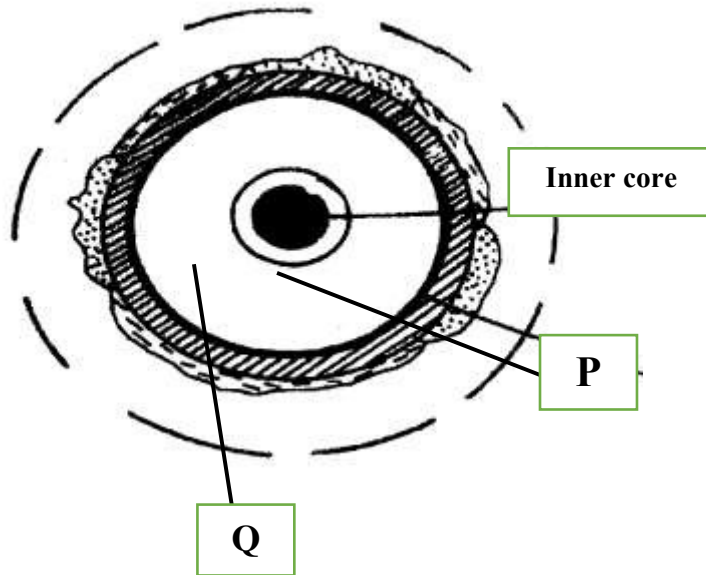


   (a) Identify:

   (i)   the layer marked **P**.                                      (1 mark)

   (ii)  the zone of discontinuity marked **Q**.                      (1 mark)

   (b) Give **four** characteristics of the core.                     (4 marks)

2. (a) What is a metamorphic rock?                                    (2 marks)

   (c) Give the metamorphic rock that form when the following rocks are

       metamorphosed:

       (i) Granite                                                    (1 mark)

       (ii) Limestone                                                 (1 mark)

3. (a) Name **two** main continental plates.                         (2 marks)

   (d) Describe how a subduction zone is formed.                      (3 marks)

4. Use the diagram below to answer question (a)
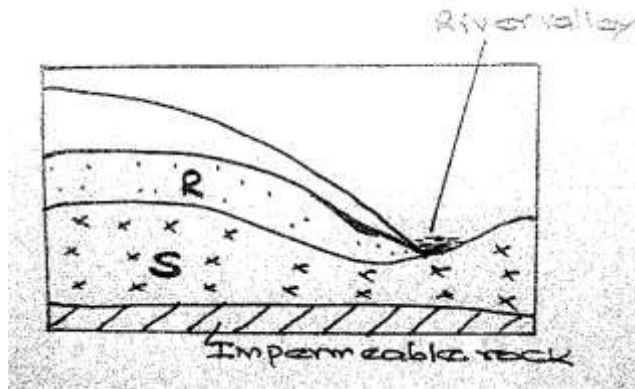
(a) Name the zones of saturation marked **R** and **S**. (2 marks)

(b) State **three** conditions necessary for the formation of an artesian well. (3 marks)

5. (a) What is a lake? (2 marks)

(b) Give **three** ways through which a lake is formed. (3 marks)

**SECTION B: Answer *Question six* and any other *Two Questions* in this section. (75MKS)**

*6) Study the map of Kijabe (1:50000) sheet 134/3 provided and answer the questions that follow*

a) i) What type map of is Kijabe extract? (1mk)

ii) Convert the map scale into statement scale (2mks)

b) i) Measure the length of the railway line to the west of Easting 30 in kilometres. (2mks)

ii) Give six digit grid reference of the forest guard post. (2mks)

c) Draw a square measuring 10cm by 10cm to represent the area enclosed by easting 30 and 40 and northings 90 and 00. (2mks)

On it mark and label;

Thicket vegetation (1mk)

Railway line (1mk)
Bore hole (1mk)
• River upper Ewaso Kedong (1mk)

d) Describe the relief of the area shown by the map (5mks)

e) i) Explain two factors influencing dairy farming in the area covered by the map (4marks)

ii) Citing evidence from the map, state three functions of Kijabe town (3mks)
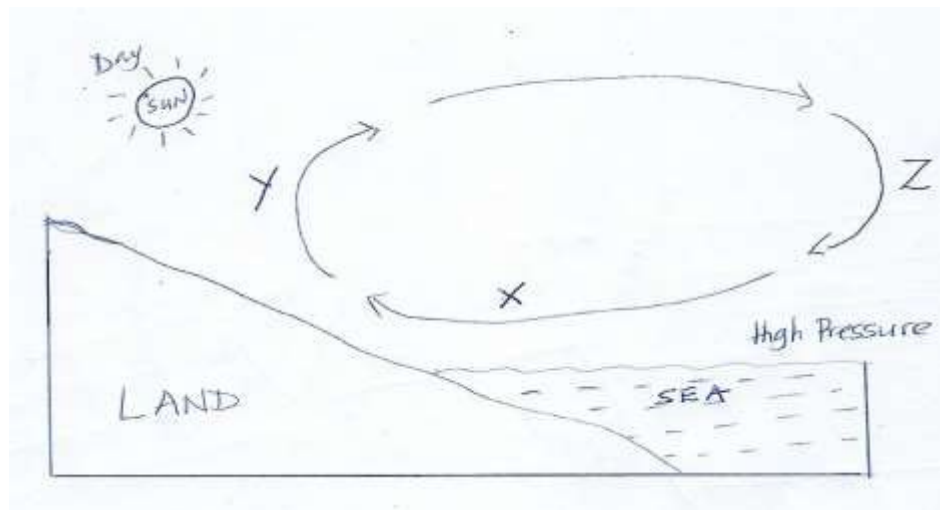

7 a) i) What is a weather station? (2mks)

ii) State four factors influencing the siting of a weather station. (4mks)

b) Explain how the following factors affect temperature

- Aspect (2mks)

- Ocean currents (2mks)

- Altitude (2mks)

c) Study the diagram below and use it to answer the questions that follow.



i)      Label the parts marked  X ,Y and Z                                    (2mks)
ii)     Identify areas in Western Kenya where  the phenomenon shown in the diagram above.  Commonly
        occurs.                                            (1mks)

c) With aid of a well labeled diagram, explain formation of relief rainfall. (6mks)

d)  Give four reasons why weather forecasting is important. (4mks)


8.a (i) Explain two causes of faulting        (4marks)

(ii) Identify two types of faults          (2marks)

b)  With the aid of well labelled diagrams, describe the formation of the rift valley by compressional forces (8marks)

c)  Identify two examples of block mountains in East Africa                 (2marks)

d)  Explain two effects of faulting on drainage                 (4marks)

e)  Your class conducted a field study at the Great Rift Valley.

   i) State three reasons why it was important to seek for permission     (3marks)

   ii)  Give two methods you used to collect data          (2marks)

9. (a) (i) Define the term glaciation.                                (2 marks)

        (ii) Name **three** types of glaciers.                                (3 marks)

(iii) Give **two** reasons why there are no glaciers in Kenya. (2 marks)
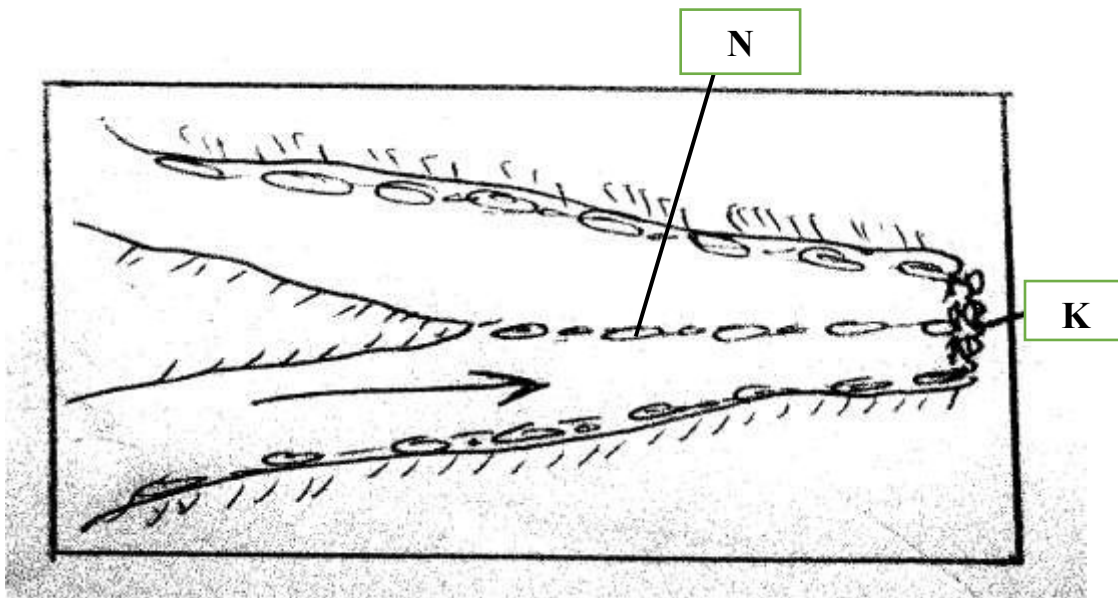
(b) Explain how each of the following factors influence the movement of a glacier:

    (i) Gradient of the slope. (3 marks)

    (ii) Temperature change (3 marks)

(c) Using a well labelled diagram, describe how a corrie lake is formed. (8 marks)

(d) (i) The diagram below shows the type of moraines:



Name the type of moraine marked **K** and **N**. (2 marks)

(ii) State **two** negative effects of glaciation in lowland areas. (2 marks)

10. (a) Name any two cold deserts in the world. (2 marks)

(b) Describe three factors that influence wind transportation in desert areas. (6 marks)

(c) With the aid of well labelled diagrams, describe how a zeugen is formed. (8 marks)

(d) Give any three features formed by water erosion in desert landscapes. (3 marks)

(e) Explain three ways in which desert features are of significance to human activities. (6 marks)

**PAPER 2**
**SECTION A: Answer all questions in this section**
1a) Name two examples of natural forests in the coastal region. (2mks)

b) Give three reasons why agroforestry is encouraged in Kenya. (3mks)

2. a) Name two main land reclamation projects in Netherlands (2mks)

b) Give two benefits that resulted from reclamation of Yala Swamp (2mks)

3 a) Name two breeds of cattle kept by nomadic pastoralists in Kenya. (2mks)

b) Give four features of nomadic pastoralism (4mks)

4 a) State four measures taken to promote domestic tourism in Kenya. (3mks)

b) Identify two physical tourist attraction sites in Switzerland. (2mks)

5 a) Distinguish between transport and communication. (2mks)

b) State two causes of increased road accidents in Kenya. (3mks)

**SECTION B**
*Answer question 6 and any other two questions from this section*
6. The table below shows the value of cash crops in Kenya shilling millions. Use to answer question (a).

| CROP/YEAR | 2015 | 2016 | 2017 |
|-----------|------|------|------|
| Coffee | 10,000 | 13,000 | 14,000 |
| Tea | 10,000 | 12,000 | 12,000 |
| Pyrethrum | 9,000 | 8,000 | 5,000 |

(a) (i) Using a vertical scale of 1cm to represent 1,000,000,000 shillings, draw a
comparative bar to represent the data above.                                    (8 marks)
(ii) Apart from comparative bar graphs, name **two** other methods that can
be used to represent the above data.                                    (2 marks)
(b) (i) Name **two** Counties where coffee is grown on large scale in Central Kenya. (2 marks)
(ii) Describe the stages in the cultivation of coffee from land preparations
to the harvesting stage.                                    (7 marks)
(c) Explain **three** problems that faced by small scale coffee farmers in Kenya. (6 marks)
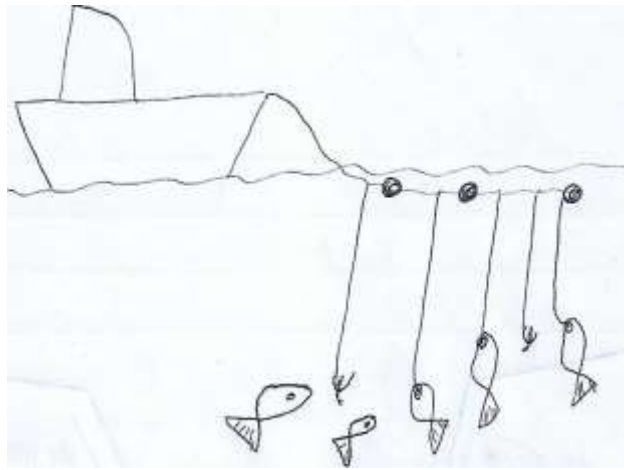7. (a) (i) What is fish farming?                                    (2 marks)
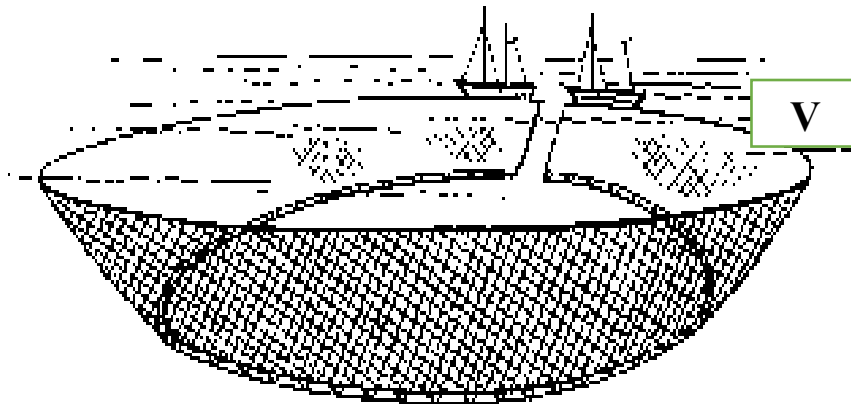(ii) State **three** reasons why fish farming is encouraged in Kenya.                (3 marks)
(b) The diagrams below shows some fishing methods. Use it to answer the question below.
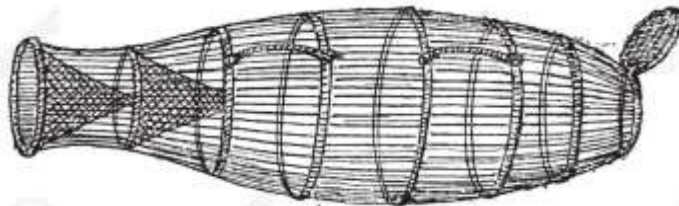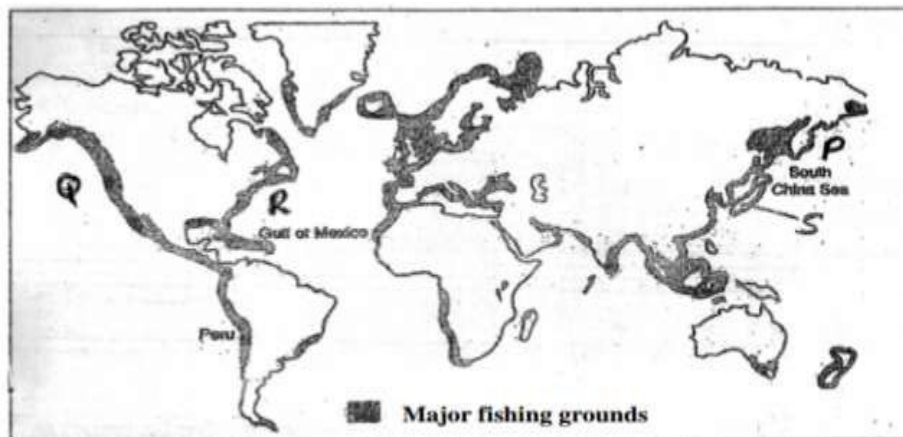


T

U



V

    (i)   Identify the fishing method marked **R** and **U**.          (2 marks)

    (ii) Describe the fishing method marked **V** in the diagram above is used to
        catch fish.          (6 marks)

(c)  The map below shows the main fishing grounds in the world.



Major fishing grounds

  (i)    Name the fishing ground marked **P**.          (1 mark)

  (ii)   Identify the country marked S.          (1 mark)

  (iii)  Explain **three** physical factors which favour fishing in the fishing ground
        marked P.          (6 marks)

(d) State **four** problems facing fishing marine fishing in Kenya.                (4 marks)

8 a) i) What is mining? (2mks)

ii) Give two formations in which mineral ores occur (2mks)

b) Explain how the following factors influence the exploitation of minerals

i) Quality of the ore    (2marks)

ii) Level of technology    (2marks)

c) Describe the dredging mining method (4mks)

d) i) State three uses of soda ash  (3marks)

ii) Explain two problems facing soda ash mining at Lake Magadi in Kenya (4mks)

e). Explain three ways in which diamond mining has contributed to the economy of South Africa (6mks)


9. (a) (i) Other than wind, name **two** other sources of renewable energy.            (2 marks)
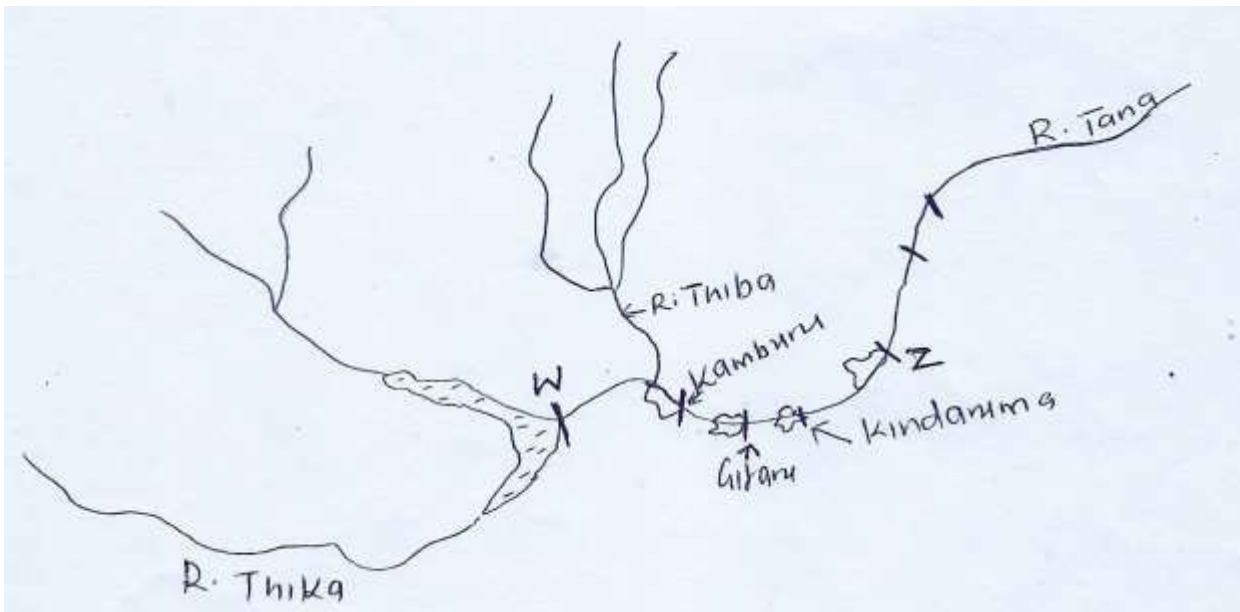
(ii) Name one main wind power station in Kenya.                (1 mark)

(iii) State **three** advantages of using wind as a source of energy.            (3 marks)

(b) The map below shows the Seven Forks hydroelectric power scheme.



(i) Name the dams marked **W** and **Z**. (2 marks)

(ii) Explain **three** physical factors that influenced the location of the Seven

Forks HEP project.                                (6 marks)

(iii) State **three** economic benefits of the Seven Forks HEP project.            (3 marks)

(d) (i) What is energy crisis? (2 marks)

(ii) Explain **three** effects of the increasing petroleum prices to the Kenyan economy. (6 marks)

10 a) i) Distinguish between industries and industrialization (2mks)

ii) Give three reasons why Kenya's striving to be industrialized (3mks)

b)i)  State four characteristics of cottage industries in in Kenya. (4mks)

ii) Give two examples of cottage industries in Kenya. (2mks)

c) Explain three problems associated with industrialization in Kenya. (6mks)

d) i) Explain three factors that influenced the location of the iron and steel industry in the Ruhr Industrial region.(6mks)

ii) Apart from the iron and steel industries, name two other industries in the Ruhr industrial region. (2mks)