GEOGRAPHY
K.C.S.E PAPER 1 2005
MARKING SCHEME

1.   (a) Two type s of human settlements
   - Rural settlements
   - Urban settlements   (2 mks)

   (b) Settlement patterns mked
   - Q - Nucleated/ clustered
   - R – Linear   (2 mks)

2.   (a) Characteristics of Jua Kali industries in Kenya
   - Are operated by individual or small groups
   - Are pursued as part time or full time occupation
   - They require low capital investment
   - They use simple equipments
   - They use local/ recycled raw materials
   - They use basic/ simple skills in craft
   - They are mostly operated in the open / sheds
   - They are widespread   (Any 3 x 1 = 3 mks)

   (b) Problems facing Jua kali industries in Kenya
   - Difficulty in getting raw materials
   - Inadequate capital for expansion
   - Competition from other well established industries/ competition from imported products
   - Inadequate mketing skills/ strategies
   - Inadequate security   (Any 3 x 1 = 3mks)

3.   (a) (i) The H.E.P stations mked
   - S- Masinga   (1 mk)
   - T – Kindaruma   (1 mk)

   (ii) The proposed H.E.P station mked
   - U- Mutonga   (1 mk)

   (b) Renewable sources of industrial energy other than water
   - Wind
   - Wood biogases
   - Solar
   - Geothermal / underground steam

4.   Ways in which drought affects the agricultural sector in Kenya
   - Leads to shortage / lack pasture
   - Leads to crop failure
   - Leads to shortage/ lack of water for livestock / irrigation
   - Leads to shortage of agricultural raw materials for agro- based industries

- Leads to reduction in export of agricultural commodities in the farmers income   (any 4 x 1 =4 mks)

5.   (a) Conditions necessary for bee keeping
            - Availability of water
            - Availability of flowering plants
            - Sheltered area from winds/ direct sun
            - An area free from disturbances/ free from predators/ free from people
              and other livestock
            - Hot conditions/ $20^0C – 30^0$ (Any 3 x 1 = 3 mks)

        (b) Reasons why the government of Kenya is encouraging bee keeping in the country
            - It provides employment / income
            - It is a source food supplements/ medicine
            - It is a source of raw materials for industries
            - It is an alternative land use for arid/ semi arid lands
            - It is way of diversification of the economy   (any 3 x1 = 3 mks)

6.   (a)   Two reasons why Thika districts has a higher population than Murang'a
                District
                - Nearness to Nairobi- Many people live in Thika town and work in
                Nairobi because house rents are lower. This increases the population of
                  the district
                - Thika town is an industrial centre and attracts large population of
                  workers unlike Murang'a were there are few industries that are rural
                  based.
                - Thika town is a larger commercial centre compared to Murang'a town. - Thika
                attracts many people who operate different businesses. This
                  increases the population of the districts.   (Any 2 x 1 = 2mks)

                pie chart representing the population of the four districts
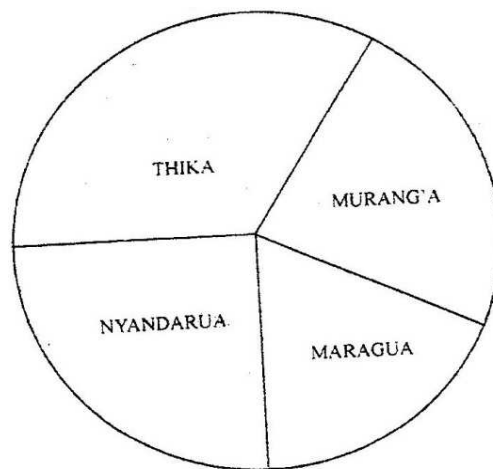
Title – 1 mk
Calculations for each segment 1 x 4 = 4 mks)
Each correctly drawn segment 1 x 4 = 4 mks)

(iii) Other statistical methods of representing data
- Divided rectangles
- Compound bar graphs
- Simple bar graphs   Any 2 x 1 = 2 mks)

(b) (i) Advantages of using a pie chart to representing data
- Gives a clear visual impression
- Easy to interpret
- Easy to compare
- Easy to read   Any 3 x 1 = 3 mks)

(ii) Reasons for carrying out population census
- For planting purposes
- To help in the distribution of resources
- To make estimate of population growth e.g. though migration
- To identify the rates of deaths and births
- To help government in creating more administrative units   (3x1 = 3 mks)

(c) How the following factors have lead to population increase in Kenya

i. Early, marriages
   People who marry early are likely to get more children because they have along period
   during which they can get children

ii. Improved medical facilities
   The child, mothers and the general population have better chances of survival because of the
   available medical facilities. The country is able to control the spread of diseases and has
   ability to cure diseases.
   This leads to higher survival rates   (2 mks)

iii. Cultural beliefs
   Some cultures encourage large families, in almost all culture; there is a tendency of people
   preferring male children. This may led to those who are not getting male children to have a
   large family as they hope to get a boy.   (2 mks)

7.   (a)   (i) Minerals mined in areas mked
           W- Fluospar   (1mk)
           X- Gold   (1mk)
           Y- Diamonds   (1mk)
           Z- Copper   (1mk)

     ii)   Three methods of mining
     - Underground /shaft/adit/slope/solution
     - Alluvial/placer/dredging/hydraulic
     - Opencast/strip   (3mks)

           i)   Sea parts through which some of the minerals mine in East Africa are exported.

                 - Mombasa   (1 mk)
                 - Dar es salaam   (1mk)

     b)   Factors that influence exploitation of minerals
           - Modes of occurrence
           - Economic value of mineral/quality of the ore/cost of mining

- Level of technology
- availability of transport facilities
- Government policy/ political influences
-Availability of mket   (Any 5x1 =5mks)

   c)   Ways in which soda ash contributes to the economy of Kenya
-It is exported to each foreign exchange which is used in the economic development of the country.
-It creates employment opportunities
-It provides raw materials to the manufacturing industries leading to industrialization e.g the glass manufacture
-It has led to the development of social amenities in the area
-It has led to the growth of Magadi town
-It has led to the growth of local and foreign tourism
-provide revenue to the government through taxes   (Any 2x3=3mks)

   d)   Ways in which mining derelicts can be reclaimed
-planting trees
-Creating a park to attract tourists
-Introducing aqua culture
-Landscaping for settlement or farming
- Refilling the holes   (any 3x1=3mks)

8   a)   i)   provinces in Kenya where wheat is grown on large scale
                - Central
                - Rift Valley
                - Eastern   (Any 2x1=3mks)

           ii)   Physical conditions that favour wheat growing in Kenya
           -Moderate rainfall/500 mm to 1270mm to enhance the growth of wheat
            - Temperatures ranging from 15^0C to 20^0C /warm conditions to facilitate growth /maturity of wheat.
            - A warn/dry/sunny spell for ripening and harvesting
            - fertile volcanic soils to sustain high production
            - Gently sloping/undulating landscape to allow proper drainage/mechanized cultivation   (Any 4x2=8mks)

    b)   Comparison of wheat farming in Canada and Kenya under the following Sub-headings
           Storage
           i)   -In both Canada and Kenya wheat is stored in grain silos
                 -In Canada wheat on transit is stored in huge grain elevators and special car boxes while in Kenya it is stored in sacks
                                          (Any 1x2 =2mks)

           ii)   Transport
                 -In Canada wheat is transported by railways (CPR and CNR) roads and water ways while in Kenya it is transported by roads and railways
                                     (Any 1x 2 =2mks)

           ii)   Mket

- In Canada wheat is for both local and export mkets while in Kenya wheat is for local mket
- Canada has a larger and reliable local mket than Kenya
- In Canada wheat is mketed by industries/government while in Kenya its mketed by N. C.P. B. or directly to the millers.

c)   Climatic problems that affect wheat farming in Canada
   - Low rainfall/unreliable rainfall which leads to crop failure/low yields.
   - Low temperature /long and cold winters which limit outdoor activities/ delays
     cultivations of wheat
   - Frost which destroys wheat
   - Hailstones which destroy wheat leading to low yields
   - Strong winds causes soil erosion especially after ploughing resulting to loss of
     fertile soils.   (Any 3x2 =3mks)

d)   Negative effects of international trade
            -Overspecialization/ overdependence on a particular item is risky incase of
             a fall in the prices in the world mket.

            iii)   Market
       - In Canada wheat is for both local and export mket while in Kenya wheat is for local
         mket
       - Canada has a larger and reliable local mket than Kenya
       - In Canada wheat is mketed by industries/government while in Kenya its mketed by
         N.C.P.B or directly to the millers.

C   i) Climatic problems that affect wheat farming ub Canada.
       - Low rainfall/unreliable rainfall which leads to failure/low yields.
       -Low temperature/ long and cold winters which limit outdoor activities/delays cultivations of
       wheat
       -Hailstones which destroy wheat leading to low yields
       -Strong winds cause soil erosion especially after ploughing resulting to loss of fertile soils.
                                          (any 3x2 = 6mks)

       i)   Uses of wheat
          - Used as animal feed
          - Used as human food
          - Used for making adhesives/glued
          - Used for paper/straw boards   (any 3x1 =3mks)
          -
9.   a) i) International trade is the exchange of goods and services between different
       countries   (2mks)
            (ii)   Major imports from Europe to Kenya
                     -Machinery
                     -capital equipment
                     -Capital equipment
                     -Pharmaceutical products /medicine
                     -Fertilizers

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-automobiles
  b) Factors that influence the import and export of goods in Kenya
    -Government policy/government legislation/imposition of tariffs on imports.
    -Demand for goods both locally and outside Kenya
    - Variation of natural resources/ goods / quality of goods
    -Availability of transport /communications
    -The purchasing power
    -the level of industrialization
    -Quota system/tariffs imposed on Kenya's imports   (Any 4x1 =4mks)

  c) Ways through which Kenya will benefit from the renewed East African Cooperation
    - There will be improved access to raw materials for industrial development
    -The expanded mket will attract new investments from local and foreign sources which will lead to expansion of industries/more earnings
    -There will improved access to raw materials for industrial development
    -The expanded mket will attract new investment from local and foreign sources which will lead to expansion of industries/more earnings
    -there will be exchange of research findings/training which will help in economic development.
    -There will improved negotiating powers in the international arena
    -There will be improved transport links between Kenya, Uganda and Tanzania which will facilitate faster movement of goods and people
    -There will be increased employment opportunities because of free movement of people within the region/expanded trade.
    -There will be mutual political understanding between Kenya and its neighbors.
                                            (Any 4x2 =8mks)
  d) Negative effects of international trade
    -Overspecialization/overdependence on a particular item is risky incase of a fall in the prices in the world mket.
    -Imported items may become a threat to the local industries leading to closure of some of them
    -some imported goods e.g expired goods or sub standard goods may have adverse effects on the citizens
    -If a country depends on another, it may sometimes have to tolerate some undesirable gestures from such countries
    -There may over exploitation of natural resources leading to their depletion e.g. minerals.
                                        (any 4x 2=8mks)

GEOGRAPHY
K.C.S.E PAPER 2 2006
MARKING SCHEME
SECTION A

1.
        (a)   Differentiate between transport and communication

Transport is the movement of goods and people from one place to another while communication is the transmission of ideas of information from one person to another. (2mks)

(b) State the causes of the decline in the use of letter writing as a means of communication in Kenya
- The high rate cost of postage
- Competition from cheaper and faster means of communication
- The delay in the delivery of letters
- Loss of letters
- Tampering with letters   (Any 3 x 1 = 3 mks)

2. (a) Give two methods used to reclaim land in Kenya
- Irrigating dry land
- Draining of swamps
- Adding manure to the infertile soils
- Introducing drought resistant crops
- Planting of trees   (any 2 x 1 = 2 mks)

(c) Outline the stages though which land is reclaimed from the sea in the Netherlands
- Part of the low lying land covered by sea water is enclosed using strong walls/dykes
- Ditches are constructed to lead water to pumping station
- The water is pumped out using windmills
- Canals are then dug to drain the excess water from the enclosed land
- Chemicals are added to the soil to reduce salinity/ fresh water is pumped into the enclosed land to reduce salinity
- Oats, rye and sugar beets are planted to improve the PH of the soil and reduce the water further
- The land is dry and ready for use   *(any 3 x1 = 3 mks)*

3. (a) Which province had the highest change in population between years 2000 and 2005?
- ❖ Rift valley   (2 mks)
(b) Calculate the percentage increase in population in Kenya between years 2000 and 2005
- ❖ 10.795%   (2 mks)

4. (a) State three physical conditions that are necessary for the growing of cocoa
- ❖ High temperatures / 25.30^0C
- ❖ High rainfall / 1,200 – 1,500mm
- ❖ Well distributed rainfall throughout the year
- ❖ Deep, well drained, fertile soils
- ❖ High relative humidity
- ❖ Shade from strong sun rays for seedlings
- ❖ Shelter from strong hamattan winds

❖ Undulating lowlands below 750m above sea level*(Any 3x1=3mks)*

(b)   List three economic problems experienced in cocoa farming in Ghana
  ❖ Fluctuation of prices in the world mket
  ❖ Competition from other land uses
  ❖ Inadequate labour during harvesting
  ❖ High production costs
  ❖ Competition from other beverages   (Any 3 x 1 = 3mks)

5.   (a)   State two reasons why some industries are located near the sources of
        raw Materials
  ❖ The raw materials may be too bulky and thus expensive to transport
  ❖ Some raw materials are perishable so they have to be processed before
     transportation
  ❖ Processing reduces transport costs   (any 2 x 1 = 2 mks)

(b)   Give three characteristics of the cottage industry in India
  ❖ They rely on simple equipment/ machines
  ❖ They are labour intensive
  ❖ They are owned by families
  ❖ They use locally available raw materials
  ❖ They produce mainly for local mkets
  ❖ They are widespread in the country   (Any 3 x 1 = 3 mks)

SECTION B

6.   (a)   (i)   What was the percentage value of the tea exported in the year
            2000?
  ❖ 29.3% (29 – 29.5%)   (2mks)

(ii)   What was the difference in the percentage values of the horticultural products
     and coffee exports in 1999?
  ❖ 5% (4.8 – 5.2%)   (2 mks)

(iii)   Describe the trend of the value of coffee exports from years 1999 to 2003
  ❖ The value was generally declining over the five year period
  ❖ The value was highest in 1999
  ❖ The decline between 1999 and 2000 was minimal
  ❖ The highest drop was between 2000 and 2001
  ❖ There was a minimal drop between 2002 and 2003
                    (Any 3 x 1 = 3 mks)

(iv)   Explain three factors which may have led to the increased export earnings from
     horticultural produce in Kenya between years 1999 and 2003
  ❖ Improved technology which leads to advanced crop[husbandry, increasing
     the volume of fresh horticultural products
  ❖ Aggressive promotion of trade abroad leading to a wide/ ready mket in
     foreign countries
  ❖ Improved ways of packaging have made the produce more competitive

- ❖ Improved infrastructure/ air/ road transport have helped in the quick means of transportation of fresh produce to the mket
- ❖ The decline benefits from traditional agricultural exports leading to the expansion of the areas under horticultural crops
- ❖ The government has encouraged the formation of organizations that are assisting horticultural farmers(Any 3 x 2 = 6 mks)

(v) Give three advantages of using simple line graphs to represent data
- ❖ They give clear visual impression
- ❖ They are easy to construct
- ❖ They are easy to interpret
- ❖ They can be used to represent a wide variety of variables
- ❖ They are appropriate for comparison   *(Any 3 x 1 = 3 mks)*

(b) Give four reasons why Kenya's agricultural export earning generally are low
- ❖ Kenya sells most of her agricultural products in their raw form and these are priced lowly
- ❖ International prices keep fluctuation from year to year
- ❖ Prices of some commodities are externally determined
- ❖ There is competition from other producing countries/ from other similar products
- ❖ Some products are inferior in quality
- ❖ There are fixed quarters for some agricultural products (Any 4x1=4mks)

(c) State five reasons why the common mket for eastern and southern Africa (COMESA) was formed
- ❖ To encourage member countries to reduce duties charged on good entering their countries from COMESA member states
- ❖ To promote trade among member states
- ❖ To acquire greater economic strength/ higher bargaining power with other trading blocs of the world
- ❖ To establish a larger mket for the goods produced in the region
- ❖ To remove trade barriers among member state/ create similar trade laws
- ❖ To create regional specialization in order to improve the quality of goods
- ❖ To create political cooperation among member states
- ❖ To create monetary and financial co- operation among members states
     (Any 5 x 1 = 5 mks)

7. (a) (i) Name the national parks mked P,Q and R
P   -   Ruwenzori   (1mk)
Q   -   Serengeti   (1 mk)
R   -   Tsavo   (1 mk)

(ii) Explain the differences between the tourist attractions in East Africa and Switzerland under the following sub- headings
- ❖ **Climate**
  While the climate of East Africa is warm and sunny most of the year, encouraging sun bathing in Switzerland there are cold winters which

enable winter sports and hot summers that expose beautiful sceneries
(2mks)

❖ **Culture**
In East Africa, there are varied/ a diversity of African cultures while in Switzerland the main culture is European
(2mks)

(b) Explain five benefits that Kenya derives from tourism
❖ Development of tourists facilities provide employment opportunities, thus reducing unemployment and raising the standards of living.
❖ Tourists pay for the variety of services offered from which Kenya gains foreign exchange revenue
❖ Tourists provide a ready mket for trade items such as handcrafts and other curios.
❖ The need for more agricultural products for tourists in hotels and lodges has stimulated the growth of agriculture and other related industries
❖ The need for improved transport and communication has let to the promotion of infrastructure of tourist sites which also benefits the local people
❖ Establishment of national parks and museums as tourist attractions has enabled Kenya to protect/ preserve its rich cultural heritage
❖ Tourism encourages cultural exchange which promotes international understanding
(any 5 x 2 = 10 mks)

(c) Explain four measures that Kenya should take in order to attract more tourists
❖ Improving infrastructure/ roads/ airports/ communications to all tourists- sites in order to make them easily accessible.
❖ Improving security to ensure the safety of the tourists is guaranteed
❖ Mketing the country more aggressively in order to make it more known/ improve the image of the country abroad
❖ Establishing a diversity of tourists attractions to avoid depending entirely on the traditional attractions and reduce competition with other tourists destinations
❖ Establishing/ modernizing tourist facilities in areas that have high potential such as western Kenya where such facilities are inadequate.
❖ Intensify domestic mketing to reduce reliance on foreign tourists.
(Any 4 x 2 = 8 mks)

8. (a) (i) Name the zones mked X and Y
X- Industrial zone/ lower class housing (1 mk)
Y- Suburb area (1 mk)

(ii) List three functions of the central business District
❖ Trading
❖ Administration
❖ Recreation
❖ Commerce/ banking/ insurance
❖ Offices
❖ Location of light industries (Any 3 x 1 = 3 mks)

(iii)   State two ways in which the residents of the zone labeled agriculture land benefit from the urban centre
- ❖ They have easy access to social amenities such as medical and educational facilities
- ❖ They have ready mket for their farm produce
- ❖ The working class can commute to and from the centre of work while living in cheaper houses
- ❖ They have better chances of job opportunities than those living far away from the centre
- ❖ They enjoy cheaper goods and services from the centre due to closeness to the town
                                                    (any 2 x 1 = 2 mks)

(b)   List four factors that contribute to the emergence of slums in urban areas in Kenya
- ❖ Low income due to unemployment . underemployment
- ❖ Shortage of proper houses]
- ❖ Inadequate financial ability
- ❖ High cost of land/ houses in others parts of the towns
- ❖ Poor urban planning
- ❖ High rates of migration into urban centers   (any 4 x 1 = 4mks)

(c)   Explain the measures that could be taken to control the following problems in urban centers in Kenya
(i) High rate of crime
- ❖ Encouraging community policing to complement the effort of the police force
- ❖ Controlling the influx of illegal arms in order to reduce the incidents of thuggery
- ❖ Enforcing laws without favour to provide protection to the law abiding citizens
- ❖ Getting rid of street families to reduce the number of idlers in the towns
                                                    (any 1 x 2 = 2 mks)

(ii) Water pollution
- ❖ Educating the residents on the appropriate ways of refuse disposal to avoid polluting water resources
- ❖ Enacting and enforcing laws on environment management/ charging those found contravening the laws *(Any 1 x 2 = 2 mks)*

(d)   Explain five factors that led to the growth of Kisumu town
- ❖ Its location at the shores of Lake Victoria led to its growth as a lake port handling trade among the three East African countries
- ❖ In 1901 Kisumu became a terminus for the Uganda railway allowing the influx and settlement of early Asian traders. This led to commercial development of the town
- ❖ Kisumu was a regional Asian traders. This led to commercial development of the town
- ❖ Kisumu was a regional administrative centre during the colonial period
- ❖ This led to setting up of administrative offices and other infrastructural facilities.
- ❖ The rich hinterland with mineral and agricultural resources provided raw materials for the development of industries and food supply for the town residents

- The high population in the surrounding areas provided the required labour force for the development of industries
- The nearby rivers and lake Victoria provided fresh water for the industrial and domestic use.
- The well developed means of transport/ road/ railway/ airport makes the town easily accessible from other parts of the country.

(Any 5 x 2 = 10 mks)

9.   (a)   (i)   Name the power dams mked J,K and L

J   -   Aswan high dam   (1 mk)
K   -   Akosombo dam   (1mk)
L   -   Kariba dam   (1mk)

   (ii)   Explain four ways in which Kenya has benefited from the development of the seven forks hydro- electric power scheme

- It has led to control of floods in the lower parts of river Tana, thus reducing the incidents of loss of life and farm produce in the area.
- The dams are used for generating electricity which is used for industrial and domestic purposes
- The dams are tourists attractions which generates foreign exchange for the country
- The scheme led to the development of industries thus creating employment opportunities
- Some of the dams in the scheme provide water for irrigation thus improving agricultural production
- The reservoirs provide fishing grounds which supply fish to the local people
- It has led to the improvement of roads making the area more accessible
- It has led to the reduction of importation of power, thus saving the foreign exchange
- The dams have provided useful sites for educational purposes

(Any 4 x 2 = 8 mks)

(b)   (i) Apart from oil, name two other non- renewable sources of energy
- Coal
- Uranium
- Natural gas   (Any 2 x 1 = 2mks)

(ii) Explain four effects that the increase in oil prices had on the economies of oil – importing countries of Africa
- The countries spend more of their foreign exchange on importation of oil, thus negatively affecting other sectors of their economies
- There has been increasing cost of transport causing a rise in the cost of movement of both people, goods and services
- Production costs have increased leading to an increase in prices of commodities thus reducing the demand on the commodities
- Some industries rely on by- products of petroleum have collapsed leading to redundancy and unemployment

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- ❖ The countries have experienced low economic growth leading to general poverty among the citizens
- ❖ It has led to the need to establish/ look for cheaper sources of energy to replace/ supplement the oil
- ❖ It has created an awareness on the need to conserve energy
- ❖ The countries that have oil potential have started exploring the possibilities of drilling their own oil to reduce/ stop importation.

(Any 4 x 2 = 8 mks)

(c)   State four ways in which Kenya can reduce the use of petroleum as a source of energy
- ❖ Encouraging people to use bicycles over short distances
- ❖ Developing alternative sources of energy
- ❖ Pooling transport/ encouraging people to use public transport]
- ❖ Importing vehicles that consume less fuel
- ❖ Improving traffic flow to reduce usage of petrol/ diesel
- ❖ Improving the roads to avoid delays that increase consumption of petrol/ diesel
- ❖ Proper maintenance of vehicles to avoid high consumption of petrol/ dieses

(Any 4 x 1 = 4 mks)

10.   (a)   (i)   Define the term fisheries
- ❖ Fisheries are water bodies where exploitation of aquatic organisms is carried out.   (2mks)

(ii)   Name two countries in Southern Africa that are important for marine fish Production
- ❖ South Africa
- ❖ Angola
- ❖ Namibia   *(Any 2 x 1 = 2 mks)*

(b)   Explain four factors that favour the fishing industry in Japan
- ❖ The cool waters are ideal for fish breeding because of the abundant supply of plankton / fish food
- ❖ The coast has many off- shore islands which provide sheltered inlets ideal for the establishment of fishing port/ villages
- ❖ The intended coastline provides secure breeding grounds for fish
- ❖ The meeting of the warm Kuro Siwo and the cold SiwoOcean currents result in upwelling of the sea water thus bringing minerals for the planktons from the sea bed to the surface
- ❖ The mountainous nature of the country restricts agricultural activities hence fishing is an alternative economic activity
- ❖ Most settlements are found along the coast and main occupation of the people there is fishing
- ❖ The Japanese have advanced technology that is used in fishing, processing and preservation of fish
- ❖ Japan has a large population which provides ready local mket for fish.
- ❖ Japanese have a long history of sea faring thus are highly experienced in fishing

- ❖ The shallow continental shelf allows light to the sea bed for growth of micro-organisms which are food for fish
- ❖ The cool waters encourages thriving of numerous species of aquatic life.

(Any 4 x 2 = 8 mks)

(c)   Describe purse seining as a method of fishing
- ❖ It uses two boats, one large and one small
- ❖ It uses a large net
- ❖ The net has floats on top and weights at the bottom to keep it in a vertical position while in water
- ❖ The net has a string along its bottom edge
- ❖ The fishermen begin by locating a shoal/ area rich in fish
- ❖ The small boat drags the net to enclose the area that has fish
- ❖ The string at the bottom of the net is pulled to close the net at the bottom and trap the fish
- ❖ The net is pulled out of the water and fish hauled into the large boat for preservation and transportation to the shore.

(Any 6 x 1 = 6 mks)

(d)   (i)   State four problems experienced in the mketing of fish in Kenya
- ❖ Some fishing areas are far from the mkets and roads are in poor condition thus fish goes bad enroute
- ❖ Fishermen lack appropriate storage and preservation facilities
- ❖ There are limited local mkets due to cultural beliefs
- ❖ The external mkets are limited by tight restrictions/ competition from other producers
- ❖ The limited number of fish species limits the mket

(Any 4 x 1 = 4 mks)

(ii) State three ways in which the Kenya government is promoting fishing industry in the country
- ❖ Fishermen are given loans
- ❖ Fishermen are encouraged to form cooperatives
- ❖ Research is carried out/ the over – fished are re- stocked with fingerlings
- ❖ There is standardization of the size of nets used in fishing
- ❖ There is restriction of fishing from some specific parts of the sea where fish breeds
- ❖ Laws have been enacted against water pollution to protect fish
- ❖ Clearing of water hyacinth from the fresh water fisheries

(Any 3 x 1 = 3 mks)

GEOGRAPHY
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MARKING SCHEME

1 a) Name two exotic breeds of dairy cattle reared in Kenya

Fresian / Hoisten

Ayshire

Guernsey

Jersey

Alderney

Brown Swiss / Swiss Brown

b) State three physical conditions that favour dairy farming in Denmk

The landscape is gently sloping which is suitable for grazing

The climate has warm / sunny summer / moderate temperature (10° – 17^oC)
 that allow out door grazing.

There is cool climate suitable for pasture growing

The moderate rainfall (500 – 1000mm) that supports growth of grass /
fodder crops

Boulder clay soil are fertile support high pasture

NB if one writes moderate rainfall of 11000mm – its wrong

2 a) State two climatic conditions that favour the growing of oil palm in Nigeria.
- High temperature throughout the year (21^oC – 30^oC)
- High rainfall 1500 – 2000mm evenly distributed throughout the year
- High relative humidity 80% to 90%
- Plenty of sunshine during the ripening season.

b) Give two problems experienced in the mketing of palm oil in Nigeria.
- Competition from other vegetable oil
- Poor road network / impassable roads.
- Production of low quality oil
- Reduced production which has lowered the amount of oil expored.

3. The table below shows petroleum production in thousand barrels per day for countries in the middle East in April 2000. Use it to answer question(a)

Country	Production in '000' barrels
Iran	3,800
Kuwait	2,550
Qatar	800
Saudi Arabia	9,600
United Arap Emirates	2,500
Iraq.	1,900

a) i) What is the difference in production between the highest and the lowest producer?

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8,800 , 000 barrels
  ii) What is the total amount of petroleum produced in April 2006 in the region?
      634,500,000 barrels (2.55×10^8)
 iii) Calculate the average daily petroleum production for Kuwait for April 2006.
      2,550,000 barrels (6.34×10^6)

b)   State three conditions that are necessary for the formation of petroleum.
      Deposition / presence of florescent and trauna over a long period of time / fossils presence of
      presence of porous rocksks / presence of non porous underneath in the deposits of the flora
      and trauna.
      Deposition of other layers of rocks / non porous / over the remains of flora and fauna
      Compression of the remains of flora and fauna due to folding of the layers of rocks.
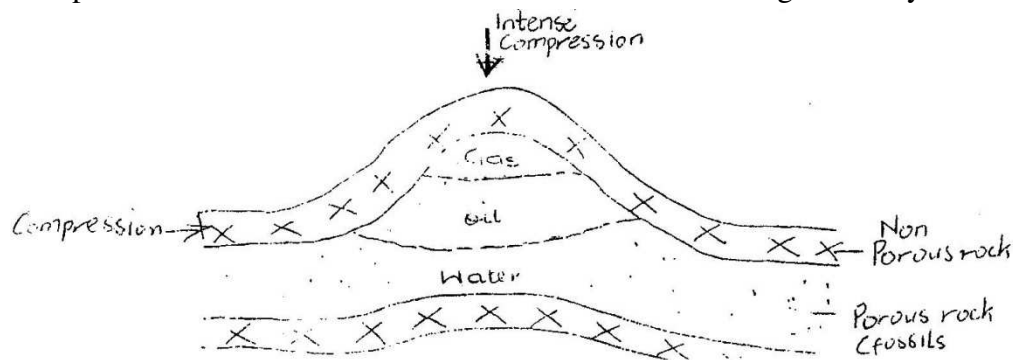
4.   Below is a sketch map showing part of the great lakes and st. Lawrence sea way.
      Use it to answer questions(a)
      See map on the questions paper
            Name
      i)   The port mked p.
            Quebec
      ii)   The canal mked Q
            New York State Barge Canal. Erie Canal
      iii) The lake mked B
            LakeOntario

  b)   State three ways in which the Great Lakes and st. Lawrence sea way has contributed to the
        growth of industries in the region.
        -     It has increased (internal and external) trade
        -     It has facilitated the transportation of bulky products
        -     It has reduced the cost of transportation of bulky products
        -     The dams along the sea way provide HEP for industrial use
        -     It has led to the development of lake ports and towns which
              provide mket / labour / housing facilities.

5 a)   A part from HIV and AIDS, give two other causes of mortality in East Africa

Natural calamities
Low nutritional standards/ famine
Conflicts / wars
Other epidemics / disease
Inadequate medical facilities / poor medical facilities
Road carnage

b) State two ways in which the spread of HIV and AID in Kenya may
   slow down economics development.
   -The sickness leads to absenteeism form work/ reduced pro
   - Money spent in treating the sick could be used for other economic activities
   - Death resulting from disease leads to loss of economically
     productive population.
   - Care takers at family level use more time caring for the sick / orphans instead of engaging in
   economic activities / high dependency ratio.

6.   The photographic below / provided shows a tea growing area in Kenya. Use to answer
        questions a and b.
        a)   What evidence in the photograph shows that this is a ground general
                -       View type of photograph
                -       It focuses on all / many objects
                The object becomes progressively smaller towards the background
                It captures the general appearance of the area.

        ii)   Draw a rectangle measuring 15cm by 10cm to represent the area of the photograph. On
                it sketch and label the main features shown on the photography.
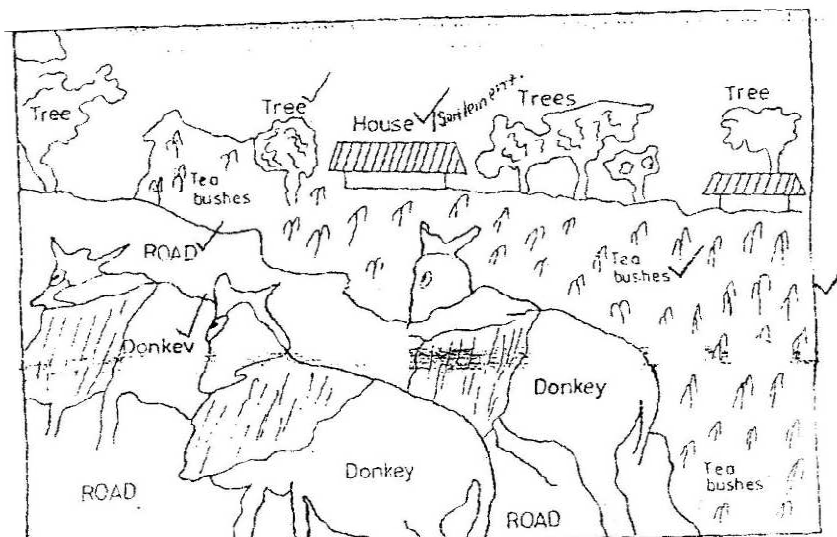
Rectangle 1 mark
donkeys 1 mark
Road 1 mark
Trees 1 mark
Tea bushes 1 mark
House 1 mark
total max (5 mks)

NB: If rectangle is disoriented, award one mk only, mk the rectangle
and not the features.

iii) Identify two features from photograph that shows that this is a small
      scale tea farm.
      - The type of simple houses / houses within the farm.
      - The mode of transport by using donkeys
      - Houses within the farm
      - Untrimmed edges of tea bushes
      - Dry maize stalks near the houses.

b)   Describe the stages involved in the cultivation of tea from land preparation to the stage
      shown on the photograph.
      -    The land is cleared of vegetation
      -    Land is ploughed / tittles
      -    Seedling / cutting are planted in nursery and allowed to grow
           to 20cm – 30cm.
      - Seedlings are transplanted on to the cleared land at the beginning of the rainy
        season / in rows. Which are about 1.5metres apart.
      - The plants are weeded / manure / mulching applied regular.
      - Once the bushes start growing, the tips of their branches are pruned /pegging
        regular to encourage the plant to form more branches.
      - After 11/2-4 years the crops is ready for harvesting (18 – 48 months)
      - The crop is harvested every two weeks once it attains maturity.
      - After harvesting, the green tea leaves are transported to the collection centre within
        24 hours.
        NB :   Sequence is necessary

C)i) Name two districts in Eastern province where tea is grown
      Embu
      Meru North/ Nyambene / Tigania / igembe
      Meru south
      Meru Central / Iment south / Imenti North
   ii) Explain four ways in which the Kenya Tea Development Agency (KTDA) assists
      small scale tea farmers in Kenya.
      It established tea nurseries from where tea farmers buy tea seedlings
      It organizes farmers education days / provide extension services for the farmers to
      learn new ideas about tea growing.
      It buys farm inputs in bulks and sells to the farmers at low prices.
      It provides credit facilities to the farmers to enable them purchase farm inputs
      It collects the green tea on behalf of the farmers.
      It establishes factories where the green tea leaves are processed.
      It undertakes the mketing of tea on behalf of the farmers.
      It improves feeders roads to improve the transport of green leaves.

Conducts research on disease / pests /improved tea for higher yields / better quality tea.

7.a) Name three agricultural food processing industries in Kenya
- Tea processing
- Coffee processing
- Milk processing
- Sugar refining
-Fruit canning / fruit processing
- Brewing
- Bakering
-Graining milling
-Meat canning / meat processing
- Oil pressing / processing
-Vegetable canning/ processing.

b) Expain how the following factors have favourable the development of industries in Thika town

i)Proximity
Nairobi provides some inputs required by the industries in Thika
There is industrial interdependent among the industries in Nairobi
and Thika.
The short rail and road connection between Nairobi and Thika provided cheaper movement of goods and services for the industries in Thika.
Nairobi provides a ready / large mket for the manufactured goods from Thika

ii)Availability of water
River chania which passes through Think town provides fresh water for industrial use especially for coffee processing and fruit canning measures.
iii) The hinterland
Thika town has rich agricultural hinterland which provides raw materials for the industries.
The hinterland is densely populated hence provides cheap labour for the industries.

c) Explain four ways in which Kenya has benefited from industrialization.
- Kenya exports / taxes industrial goods, thus earning foreign exchange/ revenue which is then used to develop other sectors of the economy.
-It has created employment opportunities hence raising the standards of living of the people / reducing unemployment.
- It has led to the development of transport and communication network thus faciliting the development of other sectors of the economy.
-It has facilitated the establishment of social amenities in the area where industries are located.

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- It has led to the acquisition of management / technical skill which are also used in other sectors of economy / enhancing the expansion of industries.
- It has led to the diversification of the economy thus reducing reliance on the agricultural sector.
- It has led to the improvement in the balances of trade since there is added value to the export exchange.
-It has led to the growth / expansion of settlement / urban centre as labour migrates to the industrial centres.
-It has let to reduction of the importation of some industrial goods thus saving foreign exchange.

d) i) Name two towns in Kenya where motor vehicles assembling plants are located
Nairobi
Mombassa
Thika

ii) Explain three factors which have favoured the development of acar manufacturing industry in Japan.
-The country has adequate capital to invest in the industry
- Advanced technology / research has led to the efficient methods of production / high quality cars which are competitive in the world mket.
-Japan has highly skilled / industrious work for which enhances efficiency in production.
-Japan has many sea ports which mkets the importation of raw materials / exportation of cars possible.
- The government policy / peace and stability has led to rapid development of the industry
Japan has highly developed hydro electric power projects which provide power needed for the industries
- The presence of large population/ high purchasing power provides a large local mket for the cars
- The presence of large population / high purchasing power provides a large local mket for the cars
- Japan's terrain is too lagged unsuitable for development of agriculture and thus industries / provide an alternative source of income to be used for buying and other requirements
- The strategic position of Japan in relation to other countries encourage trade thus promoting production of vehicles/ Japan is accessible from all direction through the se
Factor – 1 mk   Explanation – 1 mk (Explanation alone has no mk)

8. (a) (i) What is forestry

It is the science of planting, caring and using trees/ forests and their resources

It is the practice of managing and using trees/ forests associated resources

(ii) Explain three factors that favour the growth of natural forests on the slopes of Mt.Kenya.
- The area receives high rainfall 1000- 22000 mm throughout the year which encourages continuous growth of trees.
- The area has deep fertile volcanic soils that allow the roots to penetrate deep into the ground to support the trees
- The area has well drained soil thus there is no water logging which can choke plants and interfere with their growth

- The area has moderate cool condition/ climate are ideal for the growth of a variety of trees.
- The area is a gazeted forest reserve/ settlement and cultivation are prohibited hence allowing forests to grow without interference
- The steep slopes discourages human activities thus enabling forests to thrive well
  Explanation 1 mk Factor 1 mk

(iii) State five factors that have led to the reduction of the area under forests on the slopes of Mt Kenya
- The illegal encroachment of human activities
- The illegal cultivation has led to clearing of parts of the forest
- Prolonged droughts have caused drying of some forests
- Plant disease/ pests destroy some trees in the forest
- Outbreak of forest fires/ charcoal burning destroy some trees in the forest
- Over exploitation of certain species of trees.

(b) Explain four measures that the government of Kenya is taking to conserve in the country

Registering/ recognizing the efforts of NGOs like the green Belt Movement which have mounted campaigns on planting of trees

Gazeting forested areas to reduce encroachment of the public

Creating public awareness through mass media/ public bazaars on the importance of conserving forest resources

Enacting laws to prohibit the cutting of trees without a license/ protecting indigeous tree species

Establishing NEMA/ ministry of environment and natural resources to coordinate environmental management and conservation activities

Setting aside national tree planting day to encourage people to plant more trees

Advising people to practice agro- forestry so as to avoid cutting trees from the forests

Employing forest guards to protect forests form fires/ other illegal human activities

Encouraging recycling of paers/ wood based products/ use of other sources of energy to reduce demand of trees

Carrying out research through KEFRI and ICRAF in order to come up with ways of controlling diseases/ pests/ develop species suitable for different ecological regions

(c) Give the differences in the exploitation of softwood forests in Kenya and Canada under the following sub- headings
(i) Period of harvesting
Transportation

Kenya	Canada
Period of harvesting is done throughout the year	Harvesting is in winter and Early spring
Transportation mainly road transport	Mainly water transport

9.　(a) (i) Name three international Airport in Kenya
Nairobi Jomo Kenyatta Airport
Mombasa Moi International Airport
Eldoret International Airport

(ii) Give four advantages of air transport over road transport
- Air transport is faster/ quicker response in case of emergency
- It is more efficient transporting perishable goods/ valuables / high value goods
- It experiences less traffic congestions
- Helicopters can land in remote areas
- Planes can be used for activities like spraying of farms
- There are fewer accidents in air/ more safer
- It is more comfortable

(b) Explain four measure that should be taken to improve road transport in Kenya
- Construction of by passes/ sub ways/ tunnel/ flyovers/ under passes to reduce congestion of the large towns
- Construction of highways/ dual carriages road expansion to accommodate more traffic/ improve traffic flow
- Repair/ maintain the roads in goods state to reduce accidents/ improve traffic flow
- Educate road users on road safety precautions/ discipline on roads to ease traffic on roads/ reduce road accidents
- Control the amount of load carried by large lorries/ trucks to reduce damage on road surface
 - Enforce traffic rules to regulate traffic flow/ reduce road accidents
Provide paths for cyclists / pedestrians to reduce congestion on roads/ improve road safety

(c) Explain why there are few rail links among African countries
- Most of the existing rail lines were constructed by the colonialists who had no interests in linking the colonies

- The rail lines are of different gauges making it difficult for the countries too link them
- Political differences/political instability discourages attempts to link the lines
- Inadequate capital limits the construction of new lines/ maintenance of railways
- Large areas of the continents are economically unproductive thus it would be uneconomical to link railways

Difficult terrain/ thick forests makes it expensive to construct rail line
Limited trade links of production of similar commodities makes it unjustifiable to construct railway lines
- Competition from/ prevalence of other means of transport lead to neglect of railway transport.

(d) Give four reasons why there is limited use of river transport in Africa
- Some rivers have rapid/ water falls/ cataracts
Some rivers have seasonal regimes/ varying volumes
Some rivers have shallow water/ sited five mouths
Some have floating vegetation that choke the course
Some rivers have narrow channels unsuitable for sailing vessels
Some are short
Inadequate capital to develop waterways/ purchase vessels to develop ports

10. (a) (i) State two causes of water pollution
   - Oil leaks from ships/ trucks
   - Industrial effluent when discharged into rivers/ lakes
   - Washing away (into rivers and lakes) chemical/ fertilizers/ pesticides/ insecticides
   - Washing/ bathing/ watering animals in rivers/ lakes
   - Disposing of raw sewages into rivers/ lakes
   - Surface turnoff/ soil erosion into water depositing silt
   - Dumping of solid waste into water courses

   (ii) Give two effects of water pollution on the courses
   - It may cause death of aquatic life
   - It destroys aesthetic/ beauty of beach/ water bodies
   - It leads to spread of waterborne diseases
   - Causes foul smell
   - Results to sutrophictaion/ water hyacinth/ water weeds/ alga

   (b)   Explain four methods used to control floods in Kenya
       - Dykes are constructed along river banks levee of rivers to increase their height in order to prevent water from over flowing
       Dredging of river channels to deepen/ widen them to make it possible for them to accommodate excess water

- Dams are build across the rivers to control the amount of water discharges downstream/ construction of earth dams to hold back water
- Training/ re- directing a river/ straightening of a river to control its wild flow (training means cut meander loops
- Planting of trees in the catchment areas to reduce surface run off and increase infiltration
- Divering tributaries to other rivers to reduce the volume

(c)   Explain how the following soil conservation methods are usded to improve the quality of soil.
   i)   Contour farming
   -          It helps to rap water hence improving soil moisture content
   -          It helps to reduce the speed of water down slope thus
             preventing the removal of top soil.
   ii)Mulching
   The mulch adds humus in the soil as it decomposes thus enriching the soil
   - The enhances the rentention of water in the soil by protecting from
     direct sunlight / wind.
   -   It controls / stop run –off / speed of surface run – off by acting as acover to the soil
   -   It provides a suitable habitat for organism that aerate the soil by burrowing.
   iii) Crop rotation
   Since different crops utilize different mineral, rotation helps in balancing the mineral content in the soil.

(d)   You intent to carry out a held study on pollution in the local
        open air market
   i)   State three reasons why it would be necessary for you to visit
            the mket before the actual field study.
   -   To get permission from the relevant authority
   -   To be able to formulate the objectives / hypothesis
   -   To familiarize with the area of study.
   -   To be able to prepare a working schedule / to decide on the appropriate method of data collection.
   -   To determine the respondents / resource persons
   -   To asses the likely problems to be encountered.
   -   To determine the equipment /materials required.

   ii) Give two methods that you would use to collect information on pollution.
   -Interviewing
   -Taking photographs / sketching / filming
   -Observation
   -Measuring the extent of polluted area

- Administering questionnaires
-Tape recording / video taking / shooting

iii) Give two follow up activities you would carry out after the field study
- Discussing the findings
- Analyzing the data
- Writing a report
- Giving relevant advice to the stake holder
- Drawing sketches
- Displaying photographs / sketches.

GEOGRAPHY
K.C.S.E PAPER 2 2008
MARKING SCHEME
SECTION A

1. - Vegetation is cleared by slashing and burning
   - There is the use of little or no manure/use of ash
   - The land is communally owned
   - The yields decline after a certain period of continuous use. The land is abandoned when the yields decline
   - Both the settlements and plots are temporary
   - Farming depends mainly on family labour
   - The farmers use simple implements
   - It is mainly for subsistence
   - Plots are small and scattered

2. a)
   - In Kenya, softwood forests are found mainly in the highlands while in Canada they are found both in highland and lowland areas.
   - In Kenya, softwood forests cover a small percentage of the total land area while in Canada they cover large tracts of land.

   b)
   - In Kenya, logs are transported by road/trucks while in Canada transport is mainly by water by rivers.
   - In Kenya, transportation is expensive while in Canada it is cheap.

3. a) Land reclamation is the process of converting less productive land into a more productive state for agricultural or settlement purposes while land rehabilitation is the process of restoring degraded/impoverished/damaged land back to a useful state.

   b) i)
      - Diversifying the crops produced in the scheme.
      - Improving the quality of the rice produced through research
      - The government should restrict the importation of rice to reduce competition.
      - Improve the mketing strategies to enable farmers to source for mket outside Kenya

      ii)
      - Continuous dredging of canals/deepening of canals
      - Construction of dams to store water for use during dry season.
      - Government to enforce laws on proper land use in the catchment areas of the rivers that supply water to the scheme.

4. - To maintain the genetic diversity/genetic pool
   - To preserve wildlife for future generation/posterity.
   - To protect the endangered species of plants and animals
   - To ensure sustainable utilization of species
   - To attract tourists/to earn foreign exchange.
   - To use wildlife for research/for education.
   - To maintain aesthetics for recreation
   - To provide materials for medicinal extracts.

5.   a)
       -     It has created a large mket for goods produced in members countries
       -     It has resulted in the availability of a variety of goods
       -     It has led to the establishment of common tariff
       -     The removal of visa requirements has mad it easier for traders to move across borders within the region.
       b)
       -     Membership to different trading blocks by different countries.
       -     Lack of a common currency.
       -     Underdeveloped infrastructure/poor transport network
       -     Restriction of movement of people and goods/high taxes rates
       -     Political instability
       -     Political differences

6.   a)   i)   Ground /ground general view
              ii)
              -     On the foreground there is bare ground/some short vegetation cattle browsing /grazing.
              -     In the middle ground there is a herdsman and some cattle on the move/raising dust.
              -     There is a road in the middle ground
              -     At the background there are some patches of grass/some trees/shrubs/thickets
              -     Some parts of the background are bare surface
              -     There are in the middle
              -     Clear skies in the background
              -     There is a fence in the middle ground
              iii)
              -     The cloudless sky
              -     The malnourished/thin animals
              -     Dust raised by moving animals
              -     Bare ground/sparse vegetation /patches of vegetation/little vegetation
              -     Patches of dry /brown grass
       b)   i)   The pastoralists keep mainly indigenous breeds such as Zebu and Boran.
              ii)
              -     Their movement is seasonal.
              -     During the dry season the pastoralists migrate with their livestock to the highlands where there is pasture and water
              -     During the wet season they move to the plains since pasture is available.
              iii)
              -     Some cattle are sold to slaughter houses/to individuals.
              -     Some pastoralists sell their livestock through community groups/ranches.
              -     Some livestock are sold to the livestock are sold to the livestock

                    mketing Department
              -     Some pastoralists sell their animals to Kenya Meat Commission.

c)   i)
- It is a form of insurance against natural calamities /diseases / drought.
- Animals are kept as a sign of wealth/prestige/social status.
- Animals are kept for use to pay dowry.
- Animals are used as a source of food/milk/meat/blood
- Animals are a source of income

ii)
- It encourages research /the cross-breeding of traditional cattle breeds with exotic ones. This improves the quality of the animals/cross breeds are more resistant to diseases than pure exotic breeds
- It strengthens community education to teach beef cattle farmers better livestock managements
- It has constructed roads to make services accessible to farmers/make transportation of animals to mkets easier
- It encourages the replacement of the coarse grass with nutritious pasture to improve the quality of animals.
- It has sunk bore holes/dug wells/constructed dams to provide water for the animals.
- It has revived Kenya Meat Commission (KMC), a government parastatal that buys animals from farmers for slaughter.

7.   a)   i)
- National census report
- Text books
- Magazines
- Periodicals/Journals
- Statistical abstracts

ii)
- The number of male and female is almost equal to all ages.
- The dependency ratio is high
- The number of infants from age 0-4 is high/the population has a high birth rate.
- The middle age/working population is low
- The number of youth aged 5-19 is high

b)   i)   -28.7 – 21.4 = 7.3

$$\frac{7.3}{21.410} \times 100 = 3.4\%$$

ii)   **Early marriages**.
Many people in Kenya get married early and this allows them a longer period of fertility resulting in many children being born.

Improved medical care:
This leads to higher chances of survival for both the mothers and infants as well as the general population, thus increasing the survival rates.
Improved Diet:

This results into better health for the entire population hence reducing the mortality rate.

Cultural beliefs:

Some cultures encourage large families due to the preference of one gender to other/some /some cultures/religions discourage the use of contraceptive/family planning leading to couples getting many children.

Migration:

Due to political instability in neighboring countries e.g Sudan, Ethiopia there was an increase of refugees hence high population increase.

c) - It leads to high dependency ration resulting into little savings by the working group /low investments/low living standards
- There is likely to be a high unemployment rate since job opportunities may not increase at a rate that can cope with the increasing number of job seekers /may increase the rate of crime
- It increases demand for food which may lead to food shortage
- It increases demand for agricultural land causing land fragmentation/landlessness/destruction of forests.
- Expenditure while meeting demands for the large population reduces revenue that would be used for development of income generating projects hence slow economic growth.

d) **Climate:**

The cool and wet/hot & wet/high & reliable rainfall areas are densely populated because they are suitable for farming/hot dry areas have sparse population because they are unsuitable for farming

Relief:

Mountains and hilly areas have low temperatures/are rugged and this discourages settlement/development of infrastructure/agricultural activities.

Plains and gently sloping areas are usually densely populated because they are suitable for settlement and other economic activities. Flat areas depression are sparsely populated because of poor drainage, which causes swampy conditions/flooding.

Soil:

Fertile soils are suitable for agriculture thus attracting large population/areas that have poor soils have sparse population.

Pests and diseases:

Areas that are infested with pests and disease-carrying vectors discourage settlement since the conditions are unhealthy

Drainage:

Low-lying areas that are prone to periodic flooding and water logging have sparse population because they are unsuitable for agriculture and other economic activities/well drained areas attract settlement

Vegetation:

Forested areas/savannah woodland have wild animals, disease vectors and discourage human settlement and other economic activities

8. i) Soda ash average production for 5 years

=1668446 ÷ 5

=333689 .2 Tonnes

ii)   Mineral production for the year 2003
              =45369.2 Tonnes

iii)

- It is a raw material for making glass
- It is used in king detergents
- It is used in some chemical industries /petroleum refining
- It is used as a water softener/water treatment
- It is in desulphurising steel
- It is used in paper industries.

b)   i)   E- main shaft/vertical shaft
                    F- Tunnel/horizontal shaft/Gallery
                    G- Mineral ore

    ii)

- Sometimes, mines get flooded with sub/terrain water.
- There are occasional emission of poisonous gases in the mines.
- The dust produced causes respiratory diseases
- Sometimes tunnels collapse causing deaths of miners.

c)

- Gold is highly prices, thus it earns foreign exchanger which used to improve other sectors of the economy.
- Gold provides raw materials for industries that make jewellery and other highly valued items thus promoting industrial expansion.
- Gold as a medium of exchange in the world is used in South Africa as a means of paying international debts.
- Gold mining industry has generated employment opportunities, which raises the standard of living of the people /earn more income
- Gold mining has led to development of towns in the Rand and the Orange Free State creating a large demand for agricultural products.
- Mining of gold has led to the expansion of infrastructure such as transport and communication/provision of social amenities.
- Gold mining has led to the development of industrial mining skills that are useful in other sectors of the economy.

d)

- The dumping of rock waste had led to the loss of biodiversity/destruction of natural vegetation
- Dereliction of land due to dumping of waste materials is an eye sore/destroys the natural beauty of the land
- Dereliction of land due to dumping of waste materials is an eye sore/destroys the natural beauty of the land
- Pollution of the areas by noise/blasts smoke and water pools are all health hazards.
- Mining disrupts the water table which may lead to shortage of water.
- Mining takes up land that would have been used for agriculture thus interfering with food production.
- Mining displaces human settlements thus disrupting people and necessitating expensive resettlement processes.

9   a)

- Well drained fertile soils /Black cotton soils

- Gently sloping/undulating landscape
- High rainfall 1200 to 1500 mm well distributed throughout the year.
- Moderate high temperature/20^0C- 28^0C
- Long periods of sunlight.

b)
- The land is cleared of its natural vegetation
- It is ploughed using either tractors or ox-drawn ploughs
- Harrowing is done to loosen the large lumps of soil.
- Shallow furrows are dug at intervals of 1.2 and 1.8 metres apart.
- Cutting/seed cane are planted in the furrows
- Top dressing/nitrogen fertilizers are applied
- Weeding is done regularly/herbicides   are applied
- After 18 months the cane is ready for harvesting
- The cane is cut/harvested using pangas
- The harvested cane is loaded into Lorries for transportation to the factory.

c)
- Pests such as termites and white grub/diseases such as ratoon stunting and smut attack the plants and lowers the yields leading to low income for the farmers
- Accidental fires/fires set by arsonists destroy the cane resulting in heavy losses to the farmers.
- Flooding of mket by cheap imported/sugar results in unfair competition causing delay in payments to the farmers.
- Delays in harvesting reduce the quality tonnage of the cane reducing the farmer's earnings.
- Closure of some factories such as (Ramisi and Miwani) has deprived farmers of the source of income/annual closures of factories for servicing of machines disrupts the farmers' calendar of activities.
- Poor feeder roads in some areas leads to delayed delivery of the cane to the factory lowering the quality and subsequently the profit to the farmers.
- Prolonged droughts in some areas destroys the crop leading to heavy losses.
- High cost of farm input reduces the farmer' profit margins
- Mismanagement of factories and cooperatives leads to delayed payments thus discouraging the farmers

d) i)
- Weighing of the cane
- Chopping of the cane
- Crushing of the cane
- Boiling
- Filtering
- Grading
- Packing/bagging of sugar

ii)
- Molasses
- Bagasse
- Wax
- Aconitic acid
- Filter cake/mud

10. a) i)
- Canada

ii)
- The convergence of the warm and cold currents causes upwelling of ocean water which bring minerals for planktons to the surface attracting large number of fish to the area
- The convergence of warm and cold currents modifies the temperature of the ocean water making the area ideal for fishing throughout the year
- The cool waters favour survival of a wide variety of fish species which makes the area an important fishing ground

b)
- The area has a broad shallow continental shelf which provides suitable conditions for the growth of plankton used by fish as food
- The region experiences low temperatures that are favourable for the survival of fish/for preservation/storage of fish.
- Due to the ruggedness of the land bordering the shaded area/the short growing season. Many people therefore concentrate on fishing as an alternative economic activity.
- The hinterland is densely populated thus providing ready mket for the fish.
- Advanced technology has resulted in highly developed ship building/fishing vessels are equipped with modern preservation facilities, thus making it possible for fishermen to carryout large scale fishing.
- The indented coastline provides ideal fish breeding sites/sheltered bays are ideal for setting up fishing villages and ports.

c)
- There numerous inland fishing grounds such as lakes and rivers which are accessible to many people.
- There is low demand for sea fish compared to fresh water fish making fresh water fishing more preferable.
- The narrow continental shelf along the coast of East Africa limits the growth of plankton thus limiting the breeding of fish/limiting the variety of edible fish.
- The stiff competition if the open sea from the industrialized countries whose fishermen use modern fishing equipment discourages local fisherman
- The limited technology and inadequate capital make it difficult to develop marine fishing.

d) i)
- A bag-shaped net is attached to a trawler/ship
- The net is cast into the water by the trawler
- The nets' mouth is kept open by other boards/head beam
- The upper part of the net is kept afloat by corks/floats.
- Weights are used to keep the lower part of the net at the sea bed
- The trawler drags the net along the sea bed.
- After sufficient fish has been caught, the net hauled to the trawler to empty the fish,

ii)
- Canning
- Freezing
- Smoking
- Salting
- Sun-drying
- Frying

GEOGRAPHY
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MARKING SCHEME

SECTION A

1.(a)   **Name two exotic species of trees planted in Kenya.**
-       Pine
-       Cypress
-       Blue gum /eucalyptus
-       Wattle
-       Kei-apple
-       Jacaranda
-       Bomb ax
-       Grevilea
-       Cedar

b)   **State three reasons why it is necessary to carry out Afforestaion programmers in Kenya.**
-       To protect water catchment areas
-       To protect soil from erosion by wind/water
-       To ensure sustainable supply of forest products
-       To put more land under forest cover
-       To check the extinction of indigenous trees.
-       To regulate climate

2   a)   **Give three physical conditions that favour maize cultivation in Trans Nzoia district in Kenya.**
-       Temperatures ranging from 10^0C to 30^0C/Moderate to high temperature/warm to hot condition
-       Rainfall ranging from 800mm to 2500mm/moderate to high rainfall
-       Deep (fertile) well drained soils/volcanic
-       Gently sloping/undulating land
-       Sunny/dry season for ripening.

        b)   **State three reasons facing maize farming in Kenya**
-       High cost of farm inputs poor quality seeds
-       Unpredictable climatic conditions
-       fluctuating/low prices
-       Pests e.g. cornea warms/silk warms and diseases affecting the crop/impassable roads during the rainy seasons.
-       Poor storage facilities.
-       Inadequate capital
-       Striga weeds/ couch grass

3   a)   **Outline three physical factors that favoured the development of the Seven Forks hydro-electric power scheme**.

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- presence of har basement rock
- Presence of large volume of water from River Tana
- Presence of waterfalls/rapids/steep gradient
- Presence of narrow steep sided river valley/deep gorges
- Presence of impervious rock
- Regular flow/constant of R.Tana

b) **State two problems facing hydro-electric power projects in Kenya**
- Seasonal fluctuation of water levels in the rivers
- Frequent silting of the reservoirs
- High cost of maintenance of machines
- High cost or transmission of power from remote sites
- Inadequate capital to expand the projects   any 2x1 (2 mks)

4. **Use the sketch map below to answer questions (see question paper)**
   a) **Name the main settlement pattern in**
      i) The Northern part of the area represented by the map-linear
      ii) The Southern part of the area represented by the map-
         nucleated/ scattered
   b) **State two ways in which government policy may influence the distribution of human settlement.**
   - the government may displace people in order to set up projects in an area/projects setup by the government attract settlement.
   - The government may set up settlement schemes to resettle the landless
   - the government may gazette certain areas as reserves, thus controlling settlement.

   Any 2x1 (2 mks)

5 a) **Apart from windstorms name two other environmental hazards associated with climatic conditions.**
   - Lighting
   - floods
   - Drought/desertification
   - landslides
   -Heat waves
   b) **State three problems caused by windstorms in Kenya**
   - Windstorms destroy trees and crops
   - They blow off roofs of houses
   - They disrupt transport and communication lines
   - They spread bush fires
   - They cause strong sea storms
   - Accelerate erosion

SECTION B

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

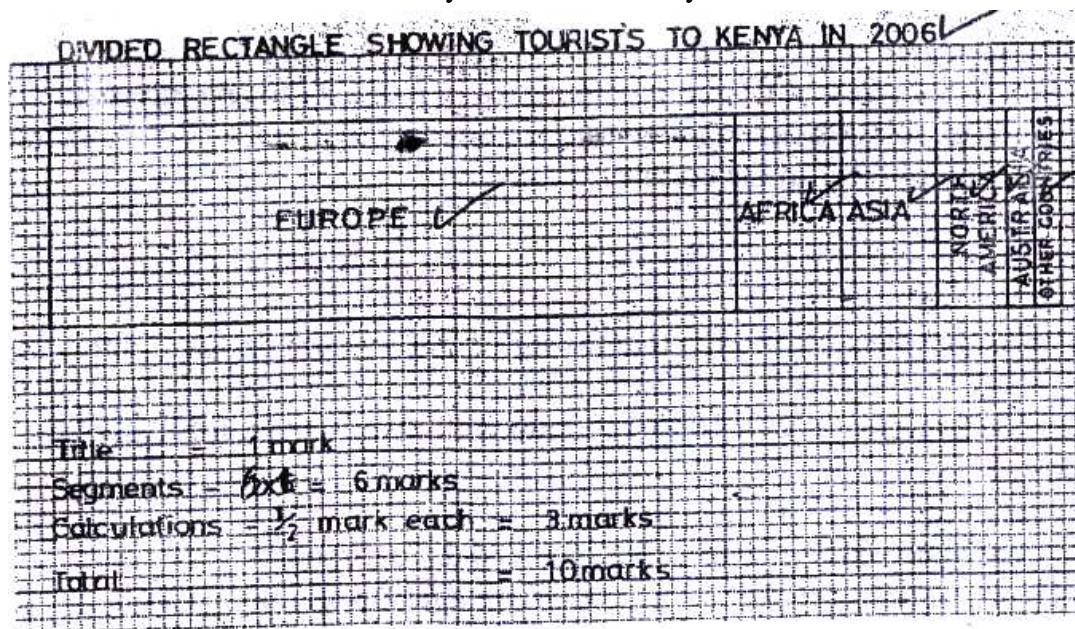| Place of origin	2005	2006
Europe	942,000	965,000
Africa	120,000	154,000
Asia	97,000	128,000
North America	94,000	103,000
Australia&New Zealand	19,000	24,000
All other countries	29,000	41,000
Total	1,301,000	1,415,000

Source: Central Bureau of Statistics

a)   i)   which continent had the highest increase in the number of tourists visiting Kenya between 2005 and 2006?

          Africa

     ii)   Calculate the percentage increase in the number of tourists visiting Kenya between 2005 and 2006?

$\dfrac{5000}{10,000}$ x 100   = 26.3%/26.32%/26%

     (iii)   Draw a divided rectangle 15 cm long to represent the number of tourists that visited Kenya in 2006. Show your calculations.

DIVIDED RECTANGLE SHOWING TOURISTS TO KENYA IN 2006

EUROPE   AFRICA ASIA   NORTH AMERICA   AUSTRALASIA   OTHER COUNTRIES

Title   =   1 mark
Segments   6x1 =   6 marks
Calculations = ½ mark each =   3 marks
Total   =   10 marks

Europe-$\dfrac{965,000}{1,415,000}$ x 15 = 10.2 cm ½ /10.23 cm

Africa-$\dfrac{154,000}{1,415,000}$ x 15 = 1.6 cm ½ cm

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Asia – $\dfrac{128,\,000}{1,415,000}$ x 15= 1.4 cm ½ /1.09 cm

North America $\quad$ $\dfrac{103,000}{1,415,000}$ x 15 = 1.1 cm ½ /1.09 cm

Australia&New Zealand $\dfrac{24,000}{1,415,000}$ x 15 = 0.3 ½ /0.25 cm

All other countries $\quad$ $\dfrac{41,000}{1,415,000}$ $\quad$ x 15 = 0.4 cm ½ /0.43 cm $\qquad$ (10 mks)

b) $\quad$ (i) **State twp advantages of using divided rectangles to represent Geographical data**
- $\quad$ They give clear visual impression of individual components
- $\quad$ They allow easy comparison
- $\quad$ They can be used to represent a wide range of data
- $\quad$ They are easy to draw
- $\quad$ They are easy to read/interpreter.
$\qquad$ (Any 2x1 (2 mks)

ii) $\quad$ **Give four reasons why in 2005 and 2006 there were more tourists visiting Kenya.**
- $\quad$ There were many direct flights from European capitals to Kenya
- $\quad$ There has been aggressive mketing for tourism in Europe
- $\quad$ Europe has had long historical ties with Kenya/good relations
- $\quad$ European countries encourage package tours to Kenya.
$\qquad$ (Any 4 x1(4 mks

c) $\quad$ **Give five reasons why domestic tourism is being encouraged in Kenya.**
- $\quad$ To expose Kenyans to the wide variety of recreational facilities
- $\quad$ To make use of tourist facilities during the low tourist seasons
- $\quad$ To ensure that Kenyans become familiar with the different parts of the Country
- $\quad$ To make Kenyans appreciate the country's national heritage /artifacts/culture/wildlife.
- $\quad$ To enable people from different communities to interact / to enhance national unit
- $\quad$ To enhance circulation of money within the country/to promote domestic trade
- $\quad$ To create employment in the country.

7 $\quad$ i) $\quad$ **State three physical conditions that favour coffee growing in the Central Highlands of Kenya**
- $\quad$ The highlands experience high 1000-1500 mm well distributed rainfall per year which is ideal for coffee.
- $\quad$ The soils are deep fertile volcanic type.
- $\quad$ The area experience cool to warm conditions 14-24^{0}C throughout the year
- $\quad$ The land has gentle slopes that allow good drainages/well drained soils
$\qquad$ (Any 3 x1 (3 mks)

b) $\quad$ **Describe the stages involved in coffee production from picking to**

mketing

- The ripe/deep red berries are picked by hand
- The harvested berries are carried in baskets/sacks to the factory
- The berries are sorted out to remove the outer/diseased berries
- The different grades are weighed
- Berries go through a machine that removes the outer covering /pulp
- The beans are fermented in tanks for sometime.
- The beans are washed and then sun dried for about a weak
- The husks are removed and the beans winnowed.
- The beans are sorted out and graded according to size and quality
- The beans are roasted at temperatures of about 10^0C
- The beans are ground into powder ready for sale.

    NB: The sequence should be followed.   (Any 4x2= (8 mks)

c) **Explain four problems facing coffee faming in Brazil**

- the wasteful techniques of growing the crops leads to soil exhaustion which makes the coffee yield per hectare low unregulated cultivation leads to soil exhaustion/low quality coffee.
- Climatic hazards/ frost destroy coffee plants reducing the yields.
- Unplanned planting leads to overproduction surplus production which lowers the prices.
- The fluctuation of coffee prices in the world mket sometimes leads to low profits.
- Stiff competition from other coffee producing countries reduces Brazil's dominance in the world coffee mket.   Any 4x2 = (8 mks)

NB: Explanations alone cannot earn a mk

    Problems max 4

    Explanations max 4   (total (8 mks)

d)   Your geography class carried out a field on a coffee farm

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

- Administering questionnaires
- Interview/asking questions
- taking photographs/video tapping
- Observation
- taking photographs/video tapping
- Observation
- taking measurements
- Collecting analysis
- Content analysis   (Any 4x1 (4 mks)

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.**

- Drawing charts
- Drawing tables

- Drawing graphs (Any 2 x1 (2 mks)

8 a) i) **what is visible trade?**
- Visible trade involves exchange of goods between countries / visible trade Involves the import and export of goods.

Any 1x2 (2 mks)

ii) **List three major imports to Kenya from Japan.**
- automobiles/Motor vehicles parts
- textiles
- Machinery/electronic appliances/radios /TVs
- Watches/precision instruments.

(Any 3x1 (3 mks)

b) **Explain four factors that influence internal trade in Kenya.**
- The demand for a variety of domestically produced goods, leads to expansion of trade.
- The cultural differences lead to distinctive specialization in production of goods for exchange.
- The production of similar goods/products by different regions limits the mket potential./Different goods enhance trade among different regions.
- The low purchasing power by a majority of Kenyans limits the mket for goods produced.
- the level of development networks/limit/enhances trade as certain commodities may not/may be carried over long distances/the mket potential is restricted/expanded.
- Security encourages expansion of trade/discharge trade.

NB:/ Explanation alone cannot score but factor alone can score.

C) **State four ways in which trade is of significance to Kenya**
- Trade generates revenue through taxation of the goods and services
- Trade creates employment opportunities in the industries that are established/creates self employment
- The demand for goods stimulates industrial growth/agric growth
- The exports of goods enable the country to earn foreign exchange
- The need to reach far off mkets leads to expansion of transport facilities
- Trade stimulates specialization in the production of goods
- Trade enhances cooperation between Kenya and the trading partners.

4x1 (4 mks)

d) **Explain four benefits which the member states of ECOWAS have derived from the creation of the trading bloc.**
- The volume of trade has been boosted as a result of an expanded in the region.
- More transport facilities have been constructed to link the member states of the Cooperation.

- The removal of trade barriers has extended the mket for the finished products/secured the mket for the member states
- The transfer of technology/capital within the trading area has been enhanced.
- The transfer of technology/capital within the trading area has been enhanced
- Cooperation in other fields such as education/health/and communication has been enhanced.
- The reduction in other fields such as education/health/communication has been enhanced.
- Cooperation in other fields such as education/health/communication has been enhanced.
- The reduction in hostilities between members' countries has enhanced peace resulting in rapid economic development.

(4 x2 (8 mks)

9. (a) (i) **Name three agricultural non-food processing industries in Kenya.**
- Tobacco processing
- Footwear making
- Leather training
- Beeswax processing
- Sisal processing
- Pyrethrum processing

Any 3 x 1 (3 mks)

ii) **State four ways in which Kenya has benefited from the mot-vehicle industry.**
- Kenya saves foreign exchange
- Kenya earns foreign exchange through motor-vehicles export
- The industry has created employment opportunities
- The industry has created employment opportunities
- The industry has promoted transport sector by availing buses/lorries/vans/cars

b) **Explain three problems arising from industrialization in Kenyan.**
- Industrialization has led to rural-urban migration which has increased the urban population leading to congestion/shortages of houses/ increase in crime
- Some industries emit toxic gases which are harmful to people/ wildlife
- Industrial effluent pollutes water sources making the water unfit for human/animal use.
- Fumes from chemical industries corrode metallic roofs of buildings hence destroying them.
- Fumes from chemical industries corrode metallic roofs of building hence destroying them
- Congestion of infrastructure and social services in the industrial waste has led to the degradation of land
- Some industries have led to the displacement of people thus disrupting their social and economic life.

<center>(Any 3x2 6 mks)</center>

c)   **Explain three factors which influenced the location of iron and steel industry in Ruhr region of Germany in the 19th Century.**

- Availability of coal- iron ore as well as limestone from the Rhine valley provided raw materials needed in the industry.
- River Rhine/Ruhr/lipped/wupper/Escher provided water required for cooling machines in the industry/industrial use.
- The region is served by navigable rivers e.g. R. Rhine/ruhh/ port manual ems, cheap transport for the bulky raw materials and finished products.
- The region is served by navigable rivers e.g. r. Rhine canals e.g. which provided Rheine
- Cheap transport for the bulky raw materials and required for cooling machines in the industry/ industrial use.
- Coal from the Ruhr region/imported petroleum provided power required in the industry
- The local population had acquired skills on iron working/availability of local skilled labour and this formed the foundation of iron and steel industry.
- Presence of rich companies e.g. Ruhr Khlet Krupp provided capital for the development of the industry
- The dense and affluent population in (central and Western) Europe /Germany provided ready mket for iron and steel.

<center>(any 3x2 6 mks)</center>

d)   You intend to carry out a field study of furniture-Making industry in the local mket centre.

i)   **State two reasons why it would be necessary for you to visit the area of study in advance.**

- To be used to be used to prepare a route map
- To determine the suitability of the area for the study
- To be able to formulate appropriate objective for the study
- Preparation of work schedule
- To be able to formulate appropriate objective for the study.
- Preparation of work schedule
- To be able to prepare appropriate data collection methods
- To find out possible problems likely to be experienced during the field study
- To seek permission for the visit.
- To determine appropriate tools for the study-to determine the likely cost to be incurred during the study.

ii)   **For your field study, you have prepared a work schedule. State two items you would include in the schedule.**

- Time for departure
- Time to spend in the study

- Time for lunch
- time to end the study
  Any 2x1= 2mks)

iii) **Give two advantages of studying about furniture-making through field work**
- It enables one to get first hand information
- It makes learning real
- It enables one to share information
- It enables one to retain information learned
- It enables one to apply skills learned
- It enables one to apply skills learned/acquired skills.
  Any 2 x 1= 2mks)

10. **The map below shows the location of some urban centers in east Africa. Use it to answer question (s). (See question paper)**

a) i) name the towns mked P, Q & r

P - Kampala

Q - Kigoma

R - Mandera

ii) Name the minerals that influenced the growth of the towns mked X and Y.
X- Diamond
Y- Trona / soda ash   (2mks)

b) **Explain four factors that influenced the growth of the towns mked X and Y.**
- Eldoret started as a railway station on the Kenya Uganda railway and thus attracted settlement by the people from around the town.
- Eldoret has a rich collection and processing centre
- It is located in an area that experiences cool and wet climate ideal for settlement
- The terrain of the land is a plateau which allows for expansion
- The modern infrastructures such as the international airport have. Encouraged trade
- High population in the surrounding region provides mket for agricultural/manufactured goods/provides labour for the industries.
- the government policy of decentralization of industries led to setting up of some industries in the town
- Eldoret is a district headquarters for Uasin- Gishu district and this has attracted administrative services in the town.
- Establishment of many educational institutions has attracted settlement

c) **Compare the ports of Mombasa and Rotterdam under the following sub-headings**
   i) Site-Mombasa is located on the drowned mouths of rivers Mwachi and Kombeni while Rotterdam is at the mouth of the river Rhine.   (2mks)

ii)	Transport links to the interior-Mombasa relies on road, railway, air and pipeline to the interior while Rotterdam has in addition, river Rhine and canals Rotterdam is a major transshipment centre.

iii)	The hinterland

Both ports have extensive hinterlands. Mombasa's hinterland extends to DRC congo while Rotterdam serves the continental Europe.	(2mks)

iv)	Port facilities- both ports have containerized terminals. Rotterdam has very large warehouse and more modernized/ sophisticated port facilities

(2mks)

d)	**Explain two ways in which urbanization negatively affects the surrounding agricultural areas.**

-	Dumping- The nearby agricultural lands are sometimes used as dumping grounds for the waste generated in the urban centers, thus polluting the environment
-	There is conflict in land use as the urban centers expand into the land that would otherwise have been used for agriculture
-	There is competition for labour as urban centers offer higher wages than agricultural areas.	Any 2x2 (4 mks)

GEOGRAPHY
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SECTION A

1.	Give three reasons why it is important to study Geography
	-	It provides knowledge about the immediate and wider environment. It makes to	understand the earth on which we live.
	-	It create awareness about the country and the rest of the world and promotes international understanding
	-	It promotes awareness on the sustainable use of resources.
	-	It promotes development of skills and critical thinking
	-	It prepares one for career opportunities.

	(a)	What is mixed farming?
	-	Mixed farming is the growing of crops and rearing of livestock on the same farm.

	(b)	State four physical conditions that favour cocoa growing in Ghana.

- High temperatures of 24 C to 30 C.
- High rainfall of 1, 200mm - 1,500mm well distributed rainfall throughout the year.
- Deep, well drained fertile soil , loamy soils/light clays
- High relative humidity 70% - 80%
- Shade from strong sun rays for the seedlings.
- Undulating lowlands 0 - 750m above sea level.
- Sunshine for ripening of pods.

2. (a) Name two forest reserves found in the costal region of Kenya.
   - Shimba hills forest
   - Arabuko Sokoke forest reserve
   - Boni / Dodori forest
   - Mangrove forest
   - Kenya forest

(b) State three ways in which the clearing of forests have affected the natural environment in Kenya.
   - It has led to reduced volume of water in the rivers / caused drying up of rivers.
   - It has led to the destruction of the natural habitat for the wildlife. It has
     endangered some of the wildlife species.
   - It has led to changes in the rainfall pattern/ Desertification.
   - It has interfered with the beauty of the environment / lowered the aesthetic value of
     the environment.
   - It has disrupted the ecosystem
   - It has accelerated soil erosion.

3. (a) Why is Kenya's petroleum refinery located at Mombasa?
   - It is easier to transport refined petroleum products than crude hence the need to process
   crude oil
        at the point of entry crude oil.
   - The raw material for the refinery comes by sea to the port of Mombasa
   - Nearness to the source of raw material.
   - Mombasa is the only port of entry.

(b) State four characteristics of the cottage industry in India.
   - It requires little capital to set up and run
   - It is labour intensive.
   - It relies on simple equipment / machines.
   - Different establishments are owned by individual/families.
   - It uses locally available raw materials
   - The products are mainly for local mket.
   - The industrial establishments are widespread in the country/located in homes.
   - Labour is provided by members of the family/individual owners.
   - The craftsmen are highly skilled. (Any 4 x 1 = 4 mks)

5. a) Name two proposed major highways in Africa.
   - the Trans Africa Highway to Mombasa
   - The Great North Read/Cairo for Gaborone (Cape town)

- The Trans-Saharan Highway/Algiers to Lagos
- Tripoli to Windhoek (Cape town)
- Cairo to Dakar   (Any 2 x 1 = 2 mks)

b) Give three reasons why it is not possible to transport goods by road directly between Mombasa and Lagos.   (3 mks)
- In some of the countries between the two parts, there are alternative modes such as railway and water which are cheaper than road transport.
- Some of the countries have not developed proper road links with their neighbours due to political differences/neglected maintenance of highways thick forests.
- Most parts of the route have difficult terrain/making movement of heavy commercial vehicles difficult/construction of roads expensive/difficult/internal/external conflicts.
- There is insecurity along some parts of the road between the two ports.
- The bulky goods that may be transported between the two ports may be costly to transport by road.   (any 3 x 1 = 3 mks)

6. Study the photograph provided and answer questions (a) and (b)
   a) Name
   i) the mining method shown in the photograph
   Panning/alluvial mining/placer mining   (1 x 1 = 1 mk)

   ii) two minerals that may be mined using the method shown in the photograph
   Gold
   Diamond
   Platinum
   Tin (2 x 1 = 2 mks)

   b) i)   Using evidence from the photograph give four indicators that show that the weather was hot when the photograph was taken.
   - Almost all the miners have removed their soils/have chested
   - Some miners are wearing hats/head scarfs
   - The sky is clear
   - The shadows indicate that the sun is almost overhead.
   - Use of an umbrella by a person at the middle ground.
   - Bodies are glustering with sweat/sweaty bodies
   - There is a reflection of the sun rays on the wider surface   (any 4 x 1 = 4 mks)
   - A mixture of water, solid/mud and mineral particles is scooped from the water bed using a pan.
   - Water is added if the mixture is thick/if the water is excess it is decanted
   - The material scooped is swirled in the pan. This separates the lighter material from the heavier particles which contain the mineral particles.
   - The lighter material is removed/poured out
   - The heavier materials are sorted to display mineral particles.
   - The mineral particles are collected from the pan.   (Any 5 x 1 = 5 mks)

   iii) Citing evidence from the photograph, explain two ways in which the mining methods has affected the environment.
   - The scooping of materials ha sled to water pollution as indicated by the brown colour stagnant water which may make it unfair for people to use.

- The continuous scooping and dumping of the waste has led to land dereliction as indicated by the depression and heaps of waste material.
- The method has led to destruction of vegetation as miners cleared the land to access the area with the mineral as indicated by absence of vegetation bare ground/in the foreground/middle ground.
- The method has led to loss of biodiversity/destroyed the ecosystem as indicated by the absence of plant life where mining is taking place.   (any 2 x 2 = 4 mks)

iv) apart from the method shown in the photograph, name three other mining methods.
- Opencast/quarrying/stripping method
- Deep shaft/underground method/solution
- Adit/drift/horizon/tunnel method/slope mining
- Drilling method (any 3 x 1 = 3 mks)

Evaporation
- High temperatures in arid and semi arid areas cause evaporation of water in lakes/seas.
- This leads to high concentration of mineral salts in the water. Continued evaporation causes further recrystallization of the salts which may thereafter be attracted as minerals such as soda ash and common salt/deposition of salts near the surface.   (2 mks)

Volcanicity
- When molten magma intrudes into rock joints minerals contained in the magma embedded in the joints called veins. Such minerals as tin and Copper occur in this form/Hop springs/gersey. Fonaliss bring minerals to the earth's surface.   (2 mks)

• **Metamorphism**
High pressure and heat cause recrystallization and hardening of certain rocks causing them to change their nature to ebcome minerals such as diamond.   (2 mks)

7. a) i) Apart from draining of swamps give two other methods through which land has been reclaimed in Kenya.
    - Irrigation
    - tsetse lfy control
    - planting of trees/afforestation
    - flood control   (any 2 x 1 = 2 mks)

    ii) Give two methods that are used to drain swamps in Kenya.
    - constructing drainage pipes
    - digging open ditches/canals
    - pumping out the water   (any 2 x 1 = 2 mks)

    b) i) Name two rivers that supply water to the Mwea Tebere irrigation scheme.
    - Thiba river
    - Nyamindi river

- Murubara   (any 2 x 1 = 2 mks)

ii) Explain how the following factors influenced the establishment of Mwea Tabere Irrigation scheme.
Topography
- The gently slopping land makes it possible for water to flow by gravity into/out of the irrigated fields.
- The gently slopping land allows for mechanization which allows large areas to be put under cultivation.   (Any 1 x 2 = 2 mks)

• Soils
- Presence of black cotton soils which is suitable for cultivation of rice/which retains water for along time.
        (2 mks)
• Population
- the area was originally sparsely populated which enabled large areas to be put under cultivation/very few people were displaced it was cheap to start the scheme.
        (2 mks)

• Government policy
- There was need to keep political detainees busy/This made the colonial government to set up the scheme at Mwea where there was a large detention.   (2 mks)

c) i) Name three areas which make up the Zuider Zee reclamation project in the Netherlands.
    - Mkerwaard
    - South Flevoland
    - East Flevoland
    - North-Eastern Polder
    - Wieringer Meer Polder   (Any 3 x 1 = 3 mks

    ii) Give four differences between land reclamation in Kenya and the Netherlands.
    - In Kenya, the area that is reclaimed is relatively small while the areas reclaimed in the Netherlands are large.
    - In Kenya, land is mainly reclaimed from swamps and marginal areas while in Netherlands reclamation is from sea.
    - In Kenya the methods used for draining water form marshy areas is digging of canals/ditches while in the Netherlands the methods are advance/use of wind pumps to drain sea water from the polders.)
    - In Kenya irrigation is used as reclaiming dry areas while irrigation in the Netherlands is used to lower the salinity of the soil in the claimed lands.
    - In Kenya the methods of land reclamation are simple like digging canals/ditches to drain water from lad while in the Netherlands the method used are highly advanced like reclaiming land from the sea/creation of polders.
    - Furrow/ridges protect the reclaimed land from invasion by the sea.(Any 4 x 2 = 8 mks)

8. a) Apart from uranium, give two other non-renewable sources of energy.
    - coal
    - petroleum

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- natural gas   (Any 2 x 1 = 2 mks)

ii) State two advantages of using uranium as a source of energy.
- It occurs in huge reserves.
- It produces large amounts of energy compared to other sources relatively small amount of uranium generates large quantities of energy.
- Iyt has a longer lifetime than the other non-renewable sources of energy.
 (Any 2 x 1 = 2 mks)

b) i) What is energy crisis.
It refers to a situation where the prices of fossil fuels rise uncontrollably as a result of short supply relative to demand.   (2 mks)
ii) Explain three ways in which energy crisis affects the economy in Kenya.
- The increase in the prices of crude oil makes Kenya to spend a lot of foreign exchange in importation. This lowers the foreign currency reserve which brings about unfavourable balance of trade which slows down the rate of economic growth.
- Increase in oil prices triggers the increase in the prices of commodities leading to low standards/high cost of living
- Increases in oil prices leads to increase in the prices of farm inputs which in turn leads to reduced agricultural production/leads to food crisis.
- The high cost of fuels increases the cost of production slowing down industrial growth.
- Oil crisis to scarcity of by-products of oil leading to shortage of raw material for certain industries.
- Increase in fuel prices leads to increased transport costs which trigger price increases in almost all the sectors of the economy.   (Any 3 x 2 = 6 mks)
NB: No credit for effect without crisis.

b) L, M and N: Refer to question paper
     L - Kaiji dam
     M - Owen falls dam/Nalubaale
     N - Kariba dam   (3 mks)

ii) State fours ways in which Kenya has benefited from the development of geothermal power.
- It has provided alternative source of energy.
- It has increased Kenya's energy input.
- It has helped stabilize the cost of electricity for consumers.
- It has helped in opening up of formerly remote areas.
- It has increased employment opportunities
- It has led the reduction of importation of hydro-electric power from Uganda/has saved foreign exchange.   (any 4 x 1= 4 mks)

d) Explain three physical factors that influence the establishment of hydro-electric
power dams.
     - Presence of a hard basement rock which provides a foundation for the dam.
     - Large volume of water/constant supply of water to enable continuous production of electricity.
     - presence of narrow gorge behind the dam which minimizes the cost of construction of the dam.
   - The deep gorge for the riverine head of water.

- Presence of steep rivers gradient/water fall/rapids to provide sufficient hydraulic force to turn the turbines.
- the presence of improper work to prevent seepage.   (Any 3 x 2 = 6 mks)

9. a) Distinguish between a game sanctuary and a national park.
    - A game sanctuary is a specific area established to give protection to a specific animal community which is either threatened with extinction or only found in a particular area while a national park is a large area set aside for the propagation, protection and reservation of wild life in their natural habitat and in which hunting is prohibited. (2 mks)

    ii) Draw a map of Kenya and on it mk and name Sibiloi National Park, Maasai Mara National reserve and Tsavo National Park. (4 mks)

SEE AMP
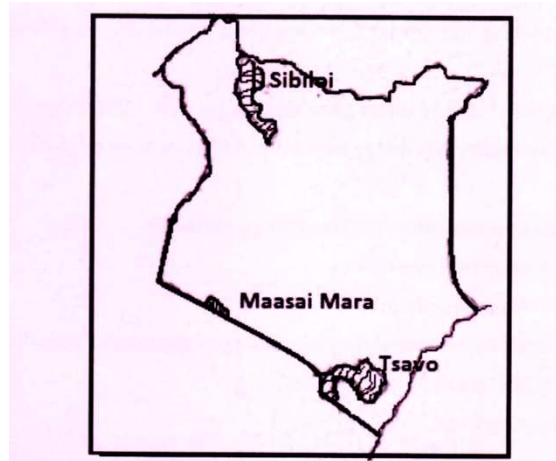
b) i) Give three factors that favour the establishment of national parks semi-arid areas of East Africa.
    - Availability of large tracts of sparsely populated land.
    - Availability of a wide variety of vegetation which provides food for the wild animals.
    - The harsh climatic condition that discourage farming and settlement/makes wildlife conservation the best alternative land use.
    - The type of vegetation found in such areas provide suitable habitat for wild animals.
    (any 3 x 1= 3 mks)

    ii) Explain two effects of drought on wildlife in Kenya.
    - It leads to shortage of pasture and water causing loss of life of animals and drying up of plant spices.
    - Prolonged drought leads to migration of animals to areas that have sufficient supply of food/water/some animals migrate to the neighbouring countries reducing the number of wild animals.
    - Forest fires break out during drought causing environment degradation and destroying the habitat for wild life.
    - wild animals invade farmlands destroying crops/some killed as they search for food.
    (Any 2 x 2 = 4 mks)

c) Explain four measures that the government of Kenya has taken to conserve wildlife.
  - establishment of national parks and game reserves to protect wildlife from human interference.
  - Enacting laws and regulations to curb poaching and game trade.
  - Educating and general public on the need to conserve wildlife/to support conservation practises/discouraging joint ownership of parks with local authorities/local communities who also benefit from the proceeds.
  - Enhancing international cooperation to help enforce the existing laws and convections which protect wildlife especially the endangered species.
  - Promoting ecotourism to reduce tourism related environment damage that may lead to extinction of wildlife species.
  - Constructing electric fences around the parks to minimize human animal conflict.
  - Establishing the ministry of wildlife to oversee to conservation process/creating of the anti-poaching unit to track down and arrest poachers/forest guards to protect forests.
  - Encouraging individuals to set up game ranches for controlled/hunting.
  - Provision of vet animals to treat animals/translocation of game research by laws.   (any 4 x 2 = 8 mks)

  d) State four ways in which wild animals are of insignificance to the economy of Kenya.
  - They are a major tourist attraction/earn foreign exchange
  - They create employment opportunities
  - They promote research activities
  - Tourism creates a large demand for food leading to agricultural development.
  - Some provide raw materials for industries.
  - They provide game meat
  - Government earns revenue.   (Any 4 x 1 = 4 mks)

10. a) i) Differentiate between internal and regional trade.
  - Internal tarde is the buying and selling of goods and services within a country's borders while regional trade between countries that are found within the same geographical region. (2 mks)
11. a)
  - coffee
  - Tea
  - fluorspar
  - Horticultural products
  - Pyrethrum extract
  - Flowers/fruits/vegetables
  - Soda ash (any 3 x 1 = 3 mks)

  b) Give four reasons why the Southern African Development Co-operation (SADC) was formed.
  - To promote regional integration among member countries.
  - To promote sustainable economic growth in the region.
  - To establish a common mket for member states/wider mket
  - To liberalize trade within the region/to lower among members
  - To strengthen the bargaining power in international trade.
  - To foster peace, stability and democracy among member states.
  - To eradicate poverty in the region
  - Toe encourage the movement off labour.   (Any 4 x 1 = 4 mks)

c) Explain four problems facing trade in Kenya.
- Cheap imported create unfair competition for some local products leading to reduction in the production of such goods/closure of some industries.
- Exports are mainly raw agricultural products which are lowly priced, hence earning little revenue for the country.
- The high fuel prices increase production/transport costs leading to increased prices of goods/low demand for goods.
- Insecurity in the country discourages investors/traders incur great losses.
    Problem - 1 mk   Explanation - 1 mk   Any 4 x 2 - 8 mks

d) Explain how the future of international trade in Kenya can be improved.
- Kenya exploring new mkets in the For East countries to avoid over reliance on the European mket. (This is likely to increase the quantity f Kenya's exports.)
- Kenya has signed trade agreements with various countries in Africa and in America which will help improve trade.
- Kenya's trade with African countries is likely to improve through the membership in trade such as COMESA and EAC.
- Some Kenya entrepreneurs are setting up branches of their industries in the neighbouring countries in order to expand trading activities.
- Kenya is undertaking partial processing of some of the agricultural products before export in order to add value to increase earnings.
- Interpretation of vision 2030 it will lead to increased production hence increased trade.
- Kenya should diversify her export products to attract a wider mket for her goods.
- Kenya should be aggressively advertise her products to attract more buyers.
- Kenya should improve her international transport and communication links for efficient transactions.   (Any 4 x 2 = 8 mks)

GEOGRAPHY
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MARKING SCHEME

SECTION A

1(a)
- Aberdeen Angus
- Here ford golloway
- Charolais
- Shorthorns

(b) in both coutries the mainly reared in areas of natural grazing
-In both countries crossbreading of beef cattle is common
-In both countries beef cattle are reared mainly in ranches

2.(a)
- Fisheries are water bodies where aquatic organisms / fish are found / reared for exploitations

(b) restocking the overfished areas
-Standardizing the mesh size of nets to be used in fishing
-Licencing commertial fishermen to control their numbers
-Restricting fishing tospecific seasons
-Restricting the disposal of untreated waste into the sea
-Monitoring and discouraging the entry of foreign fishermen offthe Indian ocean waters
-Enforcing the international conventions to protect endangered fish species

3. (a) - Saskatchewan
- Alberta
- Manitoba

(b)-there is extensive cheap land that allows cultivation on a large scale
-The un dulating landscape allows use of farm machinery / mechanization
-There is suitable climate with a frost free riod which allows for timely ripening and harvesting
- The area receives moderate rainfall average 560mm annually which is suitable for wheat growing.

4.(a)
- The industries need large amount of water for cleaning
- The industries use water for cooling machines.
- The industries dispose off their waste materials through water
- Water provide cheap means of transport
- Some industries are, located near large rivers that may provide HEP

(b) - Tobacco processing
- fibre processing

- Saw milling,
- Paper making.
- Leather tanning
- Non-edible oil processing

5(a) -- There has been widespread irnmunization for children
-    The government provides free medical services for children
- The government provides parental educations to ensure better care for children
- There is a government policy granting longer maternity leave for mothers to take care of the newborn
- RResearch on infant related diseases has been steped up
- The government provides parental education to ensure better care of children /family planning

(b) - Itleads to under utilization of resources,
- It leads to reduced mketor goods
-    leads to reduced labour force it is expensive to provide medical care / transport

6   (a)   (i) - The photograph capture the broad view of area
- The rocus is on the many objects
- The objects become progressively towards   the ground
(iii) - planted crops
-Tree stumps
- Forests
- Felled trees
(iv)- the forest has some shrubs / undergrowth
-some trees has thin stems
- Some trees are umbrella shaped
- The trees have straight stems

(b) (i) --in Kenya harvesting of trees is done throughout the year while in Canada harvesting is
done in winter and early spring
-      In Kenya harvesting is done selectively while in Canada clear / indiscriminate cutting of trees is done

(ii) In Kenya forest products are mainly sold locally whereas forest products in Canada are
mainly exported
(i)   E-R. congo

F-.R   Zambezi
G- R   orange
(ii)   H – kainji

J - Nasser
(iii)   -The -waterways should be dredged regularly to control siltation / maintain constant depth
of the rivers and lakes for easier navigation
-Dams /barrage should be constructed to control flooding hence allowing navigation
- constant clearing / controlling the growth of vegetation
- Using modern vessels and equipment
- Removal of rock obstacles from the river

(b)   - Technological efficiency in comrnunication makes business transactions easier / faster
- Modern communication network allow for the spread of ideas / information for desition
making which   enhances economic development
-      communication promotes development of related industries / business opportunities
-Communication services provide employement opportunities
- Communication connectivity promotes mobility of labour
-Government derives from communication services

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(c)   African countries use different railway gauges.which makes

-    difficult to have an integrated railway transport system transpment of goods
- construction of railways require large amounts of capital that most countries lack, either to maintain the existing linesV
- Tropical storm waters at time wash away vital section of the railway lines there by disrupting transport
-- Railway transport faces stiff competation from the more faster flexible means of transport
- Fueling /maintenance of railwaystations and other related overhead costs are high this reducing profit margins

(i)   Both countries have varied of climatic condition
(ii)   In both countries irrigation is carried out
(iii)   In both countries horticultural farming is practiced in areas with well drained soils
(iv)   In both countries sell their horticultural produce in the local and international mket
(v)   In both countries large companies / private organization have invested in horticultural farming

(ii) - the farms are generally small in size
-    Most farmers use advanced / highly specialize techniques of crop production / farmers use greenhouse
-    Most farmers practice mixed farming
-    The farms are intensively used
-    Farming is largely labour intensive

(ii) -The quantities of exports are fluctuating
-----The lowest exports were in august 2008 and December 2008
---The highest quantity of export was in match 2009
--Their was a significant drops in the quantity of exports between match and April 2009

7 - the impassable roads during the rainy season make it difficult for the perishable produce to reach the mket on time hence causing losses to the farmers
 - The cost of transporting produce by air ishigh thus lowering the profit margin
-   Poor mketing structure leads to reliance on middlemen who exploit the farmers
  - Fluctuating of the mket rates cause inconsistencies in the profit margin thus discouraging the farmers
  - low quality produce may lead rejection
 - limited preservation facilities
-    Strigent quality standards required at the international mket increases the production
-    The cost of transporting produce by air is high thus lowering the profit margin

(a) what nature provides while protecting it

(b) (i) marine parks
- Historical sites
-sandy beaches
- Sunny /warm climate
- Traditional culture water sports wildlife

(ii) -Tourism has led to increase in drug abuse
- A number of youths especially at the Coast have dropped out of school to become tour guides
  /beach boys /sex workers
- tourism has led to spread of diseases such as stds
-Tourism has led to pollution of environment/ national parks
-Tourism has led to international terrorism /piracy
-Tourism has led to increase in crime/ insecurity

GEOGRAPHY
K.C.S.E PAPER 2 2012
MARKING SCHEME

1.a) what is mining?

It is the extraction of minerals on or below the earths surface

(b)four benefits of soda ash mining to the economy of Kenya.
-it provides employment opportunities
-it has led to development of related industries
-it has led to development of Magadi town
-it has led to development of transport and communication.
-it has led to the development of social amenities.

2.a)Name two methods used in deep sea fishing
- Trawling
- Drifting
- Seining
- Line fishing

b) State three ways in which the KenyaGovernmentis promoting the fishing industry
-Encouraging fish farming
-Restoking overfished areas
-banning indiscriminate fishing /enforcing the use of standardised nets/
- Establishing research stations
- controlling water hyacinth
- dredging of silted lakes
-looking for external mkets for fish

3.a) Apart from the sunname three other sources of electricity
-Water
-Oil
-steam
-Coal
-Wind
-tides

b) Give three advantages of using solar energy
-it is a cheap source of energy
-it is an inexhaustible source of energy
-it is a clean environmentally friendly form of energy
-it can be stored for future use
-it is easy to use
-it can be found anywhere

4. state three reasons why it is necessary for the government of Kenya to carry out a nation census
-to plan for basic facilities

-to determine the total population
-to make decisions on new administrative areas
- to plan for basic facilities
-to determine the literacy level
-to project the population growth

5.(a) identify two methods used to control tsetseflies in Kenya
      -Trapping
      -use of chemicals
      -clearing bushes
      -sterilising males

 (b) state three negative effects of uncollected garbage of on the environment.
      -Garbage heaps are unattractive
      -Garbage produces foul smell
      -Garbage washed into water surfaces causes pollution
      -Organisms that thrives in garbage may transmit diseases
      -Some wastes may cause injuries

SECTION B

6.a)i) indentify the type of photograph shown above
    Ground general view photograph

  ii) rectangle measuring 15cm by 10 cm

MAIN FEATURES SHOWN ON THE PHOTOGRAPH
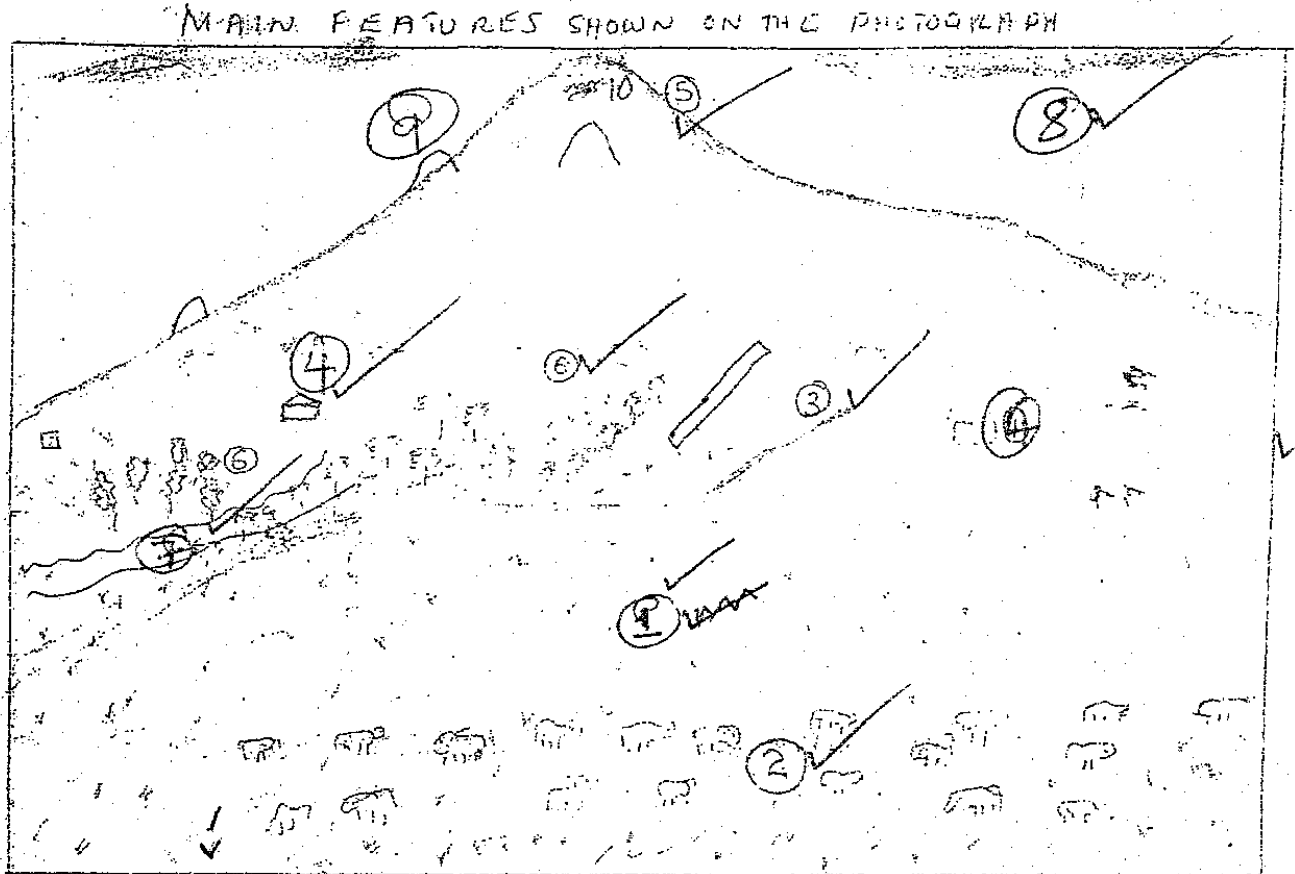
iii) features shown on the photograph
Key
1. Grassland/paddock/ fences
2. Cattle
3. Footpath
4. Homestead
5. Mountain/hill
6. Forest
7. Hedges
8. Sky

iv) using evidence from the photograph ,indentify two indicators that show the area receives high
rainfall.
-presence of a forest
-Mountain at the background
-Continuous grass cover
-Diary cattle

(b)i) name three exotic types of dairy cattle in Kenya
-Friesian
-Jersey
- Guernsey
-Aryshire
- Sahiwal

ii)
-high population in the area offers ready mket for milk and other dairy products
- There are milk processing factories which help in milk processing/ storage
- many parts of Kenya highland is well served by road network which supports fast   transport
of milk to processing places
- provision of veterinary that helped to promote rearing of high quality breeds.
-Co-operative societies have been set up to mket the dairy products

(c)   ways in which dairy farming in Kenya is different from that of Denmk
- in Kenya , cattle mainly depend on naturally growing grass/whereas in Denmk the cattle is
fed on fodder and commercial feeds.
- In Kenya mechanization is limited whereas in Denmk mechanization is idely used
- In Kenya most farmers practice mixed farming while in Denmk dairy farming is highly
specialized
- In Kenya most of the dairy products are consumed by the domestic mket whereas in Denmk
the products are mainly exported.
- In Kenya dairy production is affected by variation in climate whereas in Denmk daily
farming is least affected by variations in climates
-

7. a)   i) Name two provinces in Canada where wheat is grown on large scales
- Manitoba
-   Alberta
-   Saskatchewan

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ii) physical conditions that favour wheat farming in Canada
- Well drained soils
- Rainfall of about 560mm
- Availability of extensive land
- Sunny summers conditions

b) compare wheat farming in Kenya and in Canada
  i)Research
   In Kenya, little research is being undertaken on wheat farming while in Canada there is advanced research on wheat farming which produces high yielding seeds/ control of pests and diseases.

  ii) Government policy
   In Kenya , government policy on subsidies /incentives to wheat farmers while in Canada the government subsidizes the farmers in case of crop failure

  iii) Transport
   In Kenya , there is poor road network in wheat growing areas while in Canada there is elaborate railway network in wheat growing areas.

c) problems that affects wheat farming in Canada
   - fluctuation in world prices of wheat has led to farmers being uncertain about their earnings
   -the soil has become exhausted due to long use/ lower yields
   -occurrence of summer heat waves/frost/have destroyed wheat crops leading to lower yields
   - Canada faces competition from other wheat producing countries which has reduced the mket for their produce
    -due to pests and diseases farmers has to spray the crops hence increasing the cost of production.

d) i)reasons for preparing a working schedule
   -it ensures all the intesed activities are captured
   - -it helps in time management

  ii) problems that face wheat harvesting
       -shortage of harvesting machinery
       -high cost of labour
       - weather conditions

iii) limitation of methods.
       - The respondent may give inaccurate information.
       - It is time consume.
       - Some respondent may be unwilling to be interviewed
       - Language barrier.

  9. i)types of inland water ways used for transport in Africa
       - rivers

- lakes
- canals

  ii) reasons why the government is expanding pipeline transport
- to reduce congestion on our roads
- to reduce road accidents by tankers
- to reduce congestion on oil terminus
- pipeline transport is cheaper than road transport
- pipeline transport is more reliable/ convenient than road

b(i) advantages of railway station
- carry heavy bulkgoods/large carring capacity
- it is more reliable /effitient due to fixed time schedules
- it is a cheap mode of transport/ low maintainance
- electric trains are fast.
- Narrow they thus economical in land space

ii) conditions of roads in Kenya that may lead to accidents
- Some roads have potholes /uneven road surfaces
- Some roads are steep
- Some roads are slipperly
- Some roads are un mkerble

c) ii)ports mked M and N
- M   Duluth
- N   Buffalo

  ii) Lake mked N
    N   lake Huron

d) benefits of the Great lakes and st. Lawrence seaway to the econo0mies of USA and Canada.
-they have encouraged trade in both countries by providing cheap means of transport
- the dams constructed along the route provide hydroelectric power for domestic /industrial use
- they have created employment opportunities in the transport industry thus raising the standard of living of the people in the area.
- they are sources of water for domestic/ industrial use
- they are tourist attractions hence generate income for their attractions
-cheap/easy movement of raw materials

10. a) i) settlement patterns
- Nucleated settlement/ clustered
-dispensed settlement /scattered
-linear settlement
-radial settlement

ii)   - Areas that receives (reliable)rainfall attract more people since they can engage in arable farming that receive low rainfall have fewer people as they are unsuitable for arable farming.
-Areas near water bodies
-Areas with cool moderate temperature

-Areas with fertile soils attract settlement

b)i) location

its proximity to Nairobi has led to industrial expansion as Nairobi acts as mket to its
products/supplies

Hinterland –Thika town is located in an area with a rich agricultural hinterland which which
provides raw materials for industries food for the population hence provides cheap labour.

Transport
-it has a railway/ road connection which provides easy movement of food/people

Land
- There is ample/flat land for development of industries/settlement
- The cost of land is relatively cheap hence attracts investors

ii) Other function in Thika
- It is an industrial center
- It is an educational center
- It is a commercial center
- It is an administrative center
- It is recreational center
- It is a religious center.

c)   - it encourage national unity
- it promotes links with many areas of transport
- it provides employment opportunities

GEOGRAPHY
K.C.S.E PAPER 2 2013
MARKING SCHEME

1. (a) **Name the method of irrigation used in Perkerra irrigation scheme.**
   - Furrow / canal irrigation. (1 mk)

 (b) **State three factors that influenced the location of the Perkerra irrigation scheme.**
   (i) Availability of extensive land for irrigation.
   (ii) Availability of water from River Perkerra.
   (iii) The gently sloping land that allows mechanization/easy flow of water for irrigation by gravity.
   (iv) Presence of fertile loamy/alluvial soils good for the growth of a variety of crops.
   (v) Dry conditions/semi arid/unreliable/low rainfall making it necessary to irrigate the area.
   (vi) The area was sparsely populated.

2. **State four effects of human encroachment into wildlife habitats.**
   (i) Leads to killing / dying of some animals.
   (ii) Some animals / plants may become extinct.
   (iii) Leads to wildlife predation / competition may set in.
   (iv) Leads to fragmentation/reduction of the habitat.
   (v) Leads to increased human / wildlife conflicts.
   (vi) Leads to migration of some animals.

3. (a) **Name two countries to which Kenya exports petroleum products.**
   (i) Uganda
   (ii) Rwanda
   (iii) Burundi
   (iv) Democratic Republic of Congo
   (v) Southern Sudan
   (vi) Tanzania
   (vii) Comoros

(b) **State four factors that influence external trade in Kenya.**
    (i) Demand for goods/services.
    (ii) Similarities / differences in the goods produced.
    (iii) The purchasing power of the people/availability of capital.
    (iv) Availability of transport / communication networks.
    (v) Political stability/relationships of trading partners.
    (vi) International trade agreements / restrictions.
    (vii) The level of technology.
    (viii) Varying exchange rates.
    (ix) Availability of aids to trade

4. (a) **State two factors that lead to the development of nucleated settlement patterns.**
    (i) Availability of social amenities.
    (ii) Presence of a natural resource / industrial plants.
    (iii) Limitation of land for building.
    (iv) Assurance of security / defence.
    (v) Government policy on settlement.

(b) **Identify two differences in the functions of Nairobi and New York.**

Nairobi	New York
- It is an inland / dry port.	- It is a seaport.
- It is a national capital.	- It is a state capital.
- It is a regional commercial centre.	- It is an international commercial centre.

(Any 2 x 2 = 4 mks)

5. **Identify five measures used to control floods in Kenya.**
    (i) Constructing channels/ditches/furrows to drain off the water.
    (ii) Constructing dykes / levees along river banks.
    (iii) Dredging / widening of river channels.
    (iv) Building of dams across rivers/earth dams.
    (v) Training / re-directing / straightening of rivers.
    (vi) Planting trees in the catchment areas.

SECTION B
*Answer question **SIX** and any other **TWO** questions from this Section.*

6. (a) (i) **Apart from pie-chart, name two other statistical methods that can be used to represent the data in the table.**
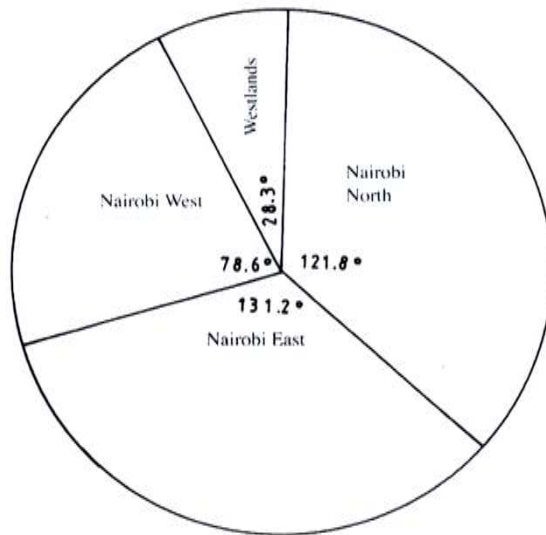   - Divided rectangles
    - Simple bar graphs
    - Compound bar graphs/cummulative/divided bar graphs
    - Proportional circles

(Any 2 x 1 = 2 mks)

(ii) **Using a radius of 5 cm, draw a pie chart to represent the data above. Show your calculations.**

A PIE CHART REPESENTING POPULATION SIZE OF FOUR DISTRICTS IN NAIROBI IN 2009

Nairobi West $= \dfrac{685\cancel{000}}{3138\cancel{000}} \times 360° = 78.6°/79°$

Nairobi East $= \dfrac{1144\cancel{000}}{3138\cancel{000}} \times 360° = 131.2°/131°$

Nairobi North $= \dfrac{1062\cancel{000}}{3138\cancel{000}} \times 360° = 121.8°/122°$

Westlands $= \dfrac{247\cancel{000}}{1138\cancel{000}} \times 360° = 28.3°/28°$

Title = 1 mark
Calculations = 4 marks
Each correctly drawn segment 1x4=4 marks

(iii) **Calculate the populations growth rate of Nairobi over 10 year period if the population was approximately 2,143,000 in 1999.**

population in: 2009   3,138,000
1999   2,143,000
difference   995,000

Growth rate over 10 year period

$$= \frac{995000}{2143000} \times \frac{100}{10} = 4.64\%$$

(b) **Explain two factors which may have led to the large population increase in Nairobi between 1999 and 2009.**

   (i) High migration into Nairobi in search of employment / due to political instability in some neighbouring countries / internal strife in parts of the country.
   (ii) Low mortality rate due to improved medical care.
   (iii) High birth rate due to the improved nutrition.

(c) **Explain four positive effects of low population growth in a country.**
   (i) High purchasing power/high standard of living/reduced dependancy ratio as majority of the population is employed.
   (ii) Low dependancy ratio allows for investment/savings/high standard of living/ investments.
   (iii) Reduced pressure on land making it available for economic activities.
   (iv) Low crime rate as most people are engaged in gainful activities.
   (v) Provision of adequate social amenities as the government has few people to provide for.
   (vi) The government saves funds for investment in economic activities.
(Any 4 x 2 = 8 mks)

7. (a) **Name the minerals mined in the areas mked J, K, and L.**
   - J - Limestone   *(1 mk)*
   - K - Soda ash / Trona   *(1 mk)*
   - L - Diamond   *(1 mk)*
(b) **Explain how the following factors influence the exploitation of minerals.**
   (i) Mode of occurrence of minerals
   (ii) Transport
   (iii) Level of technology
(i) **Mode of occurrence of minerals**
   - Minerals that occur in small quantities/ lodes/veins may limit exploitation since they are of low commercial value unless the mineral is of high value they will be exploited / large deposits are extracted as they are likely to be profitable / can sustain the mining process over a long time.
   - Minerals at or near the surface/alluvial deposits are easier/cheaper to extract / the deep seated minerals are expensive to extract.
   - Minerals close to the surface/beds/layers/seams are extracted using open cast method of mining/minerals that occur deep in the ground/veins/lodes

are extracted using underground / shaft method.

(Any 2 x 2 = 4 mks)

(ii) **Transport**
- Efficient transport links allow mineral products to be moved from the
  mining site to the ports / markets without delay.
- Minerals that are bulky require railway/water/ cheap transport system to
  reduce the total cost of production.
- Mineral deposits in remote areas/poorly developed transport system are less
  likely to be exploited.

(iii) **Level of technology** *(Any 2 x 2 = 4 mks)*
- Advanced technology has improved mining operations thus leading to highquality /
  large quantity mineral products.
- High level technology allows for effective exploration of minerals
  leading to accurate location of minerals.
- Advanced technology boost effectiveness in production hence reducing wastage.
- High level technology in mining operations reduces the destruction of the
  environment /improves the health and safety of workers.
- Low level technology limits exploitation/low quantity mined.

(Any 2 x 2 = 4 mks)

(c) **describe opencast method of mining.**
(i) The unwanted materials / overburden laying on top of the mineral are removed.
(ii) The soft mineral ore is removed by digging / quarrying / stripping.
(iii) Any hard rock / mineral ore is broken up by blasting.
(iv) Huge power shovels are used to dig up mineral deposits.
(v) The mineral ore is loaded onto trucks / railway wagon to the processing plant.

(d) **Explain three benefits of petroleum mining to the economies of Middle East
countries.** *(Any 4 x 1 = 4 mks)*
(i) The countries earn foreign exchange which is used to develop other sectors
   of the economy.
(ii) Petroleum is used as a raw material leading to the growth of petroleum
    related industries.
(iii) The revenue / royalties have enabled the Middle East countries' investments
     overseas to increase immensely.
(iv) Petroleum mining has led to creation of employment opportunities for local
    population, raising standard of living.
(v) The proceeds from petroleum mining have been used to develop social
    amenities / infrastructure.
(vi) Income from petroleum mining has lead to development/growth/expansion of
    towns.

8. (a) (i) **What is agriculture?**
   - It is the practice of cultivating crops and rearing of livestock.
   (ii) **Identify four characteristics of plantation farming in Kenya.**
   - The holdings / farms are large/40 hectares and above.
   - Ownership is by individuals / groups.
   - Farming is scientifically managed.
   - It requires heavy capital outlay.

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- There is high yield per unit area.
- There is growing of a single crop/monoculture.
- Farms are highly mechanised.
- The produce is for commercial purpose.
- Some farms are labour intensive.

(Any 4 x 1 4 mks)

(b) **Give four physical factors that influence the growing of tea in Kenya.**
    (i) Undulating / gently sloping land / 1,500 to 2,400 metres above sea level/high
       attitude.
    (ii) Deep well drained soils/volcanic soils.
    (iii) Slightly acidic soils / pH of between 4 to 6.
    (iv) High annual rainfall / 1000 to 2000 mm of rainfall.
    (v) Well distributed rainfall throughout the year.
    (vi) Moderte to high temperatures / average temperatures of 21℃/15-30
       C/warm to hot climate.

(c) **Explain four problems facing small scale tea farming in Kenya.** *(Any 4 x 1 = 4 mks)*
    (i) Delayed payments to farmers mismanagement lowers their morale.
    (ii) Pests eg. thrips/spidermite/crecise mite/weaving/beatles destroy tea plants there
      by reducing quality / yields.
    (iii) Poor road networks in some tea growing areas leads to delay in collection
      of the harvested tea resulting into wastage / losses to farmers.
    (iv) High cost of farm inputs makes them unaffordable to the farmers leading
      to low yields / low profit margins.
    (v) Climatic hazards / hailstone/drought/frost weather conditions lead to destruction
      of the crop thus lowering quality / quantity of leaf production.
    (vi) Fluctuations of tea prices in the world mket leads to uncertainty in earnings
      making it difficult for farmers to plan ahead.
    (vii) Shortage of labour during tea picking season makes the hiring of labour
      expensive/lowering farmer income.
    (viii) Diseases eg. Amillaria/root rot kills the tea bushes/lower yields.
    (ix) Low payment to farmers lowers their morale.
    (x) Poor mketing strategy leads to low earnings.

(d) **You plan to carry out a field study in a tea farm.**
(i) **Give four reasons why you need a route map for the study**.
    - To show the direction to be followed during the field study.
    - To assist in estimating the time required for the study.
    - To help in deciding the technique of data collection.
    - To help in estimation of distances to be covered during the study.
    - To help in drawing up a work schedule.

(Any 4 x 1 = 4 mks)

(ii) **What information are you likely to gather about marketing of processed tea during the study? Tea is mketed:**
    - Through factory door sales.
    - Directly to local / overseas buyers.

- To Kenya Tea Packers Limited (KETEPA)/other packers.
- Through Mombasa Tea auction.

(Any 3 x 1 = 3 mks)

9. (a) **Identify three sources of renewable energy.**
    (i) Wind
    (ii) Sun
    (iii) Water
    (iv) Tides / waves
    (v) Geothermal steam
    (vi) Biomass
    (vii) Wood/trees
    (viii) Drought animals

 (b) (i) **Name three main hydroelectric power stations along the river Tana.**
    - Masinga
    - Kamburu
    - Gitaru
    - Kindaruma
    - Kiambere

 (ii) **Apart from providing electric power, state four other benefits of the**
    dams along the river Tana.
    - The reservoirs provide water for domestic use /industrial use/irrigation.
    - The dams / reservoirs are tourist attractions.
    - The reservoirs are fresh water fisheries.
    - The reservoirs modify local climate.
    - The dams act as bridges across the river.
    - The dams and reservoirs control floods downsteam.

 (iii) **Identify two problems that affect the production of power along river Tana.**
    - Fluctuations of water levels in the reservoirss.
    - Inadequate capital for maintenance / high cost of dredging/expansion.
    - Silting of the reservoirs.

(c) **Explain four measures the Government of Kenya has taken to conserve energy.**
    (i) Encouraging people to use renewable sources in order to reduce the
      Over reliance of fossil fuels.
    (ii) Developing energy saving technologies in order to reduce the high
      consumption of energy.
    (iii) Enforcing the legislation against indiscriminate cutting down of trees
      for fuel thus conserving existing resources.
    (iv) Educating the public on the careful use of energy in order to save it.
    (v) Progress taxation on energy consumption in order to discourage the
      misuse of energy.
    (vi) Proper planning of road networks in urban areas to reduce traffic jam
      hence saving on fuel consumption.
    (vii) Encouraging the use of public transport/walking/cycling/railway in order to
      reduce the number of vehicles on the roads thus reducing energy consumption.

(viii) Discouraging importation of high fuel consumption vehicles to reduce amount of fuel used.

(ix) Encouraging afforestation/reafforestation for continuous supply of wood fuel.

(Any 4 x 2 = 8 mks)

(d) **Some students carried out a field study on sources of energy by sampling the households around their school.**

(i) **Identify two sampling techniques the students may have used during the study.**
- Stratified
- Random
- Systematic   *(Any 2 x 1 = 2 mks)*

(ii) **Give three advantages of sampling the households for the study.**
- To save on time.
- To reduce bias.
- To allow for detailed study.
- To reduce cost.

(Any 3 x 1 = 3 mks)

10. (a) **differentiate manufacturing industries from tertiary industries.**

Manufacturing industries change raw materials into semi-processed / finished products while tertiary industries provide services to consumers.

(2 mks)

(b) **Explain why the Government of Kenya encourages the setting up of industries in rural areas.**

(i) It creates employment opportunities in rural areas thus reducing migration into urban areas/raising standards of living.

(ii) It leads to utilization of locally available raw materials that would otherwise be left idle.

(iii) It leads to improvement of transport / communication networks thus opening up rural areas for development.

(iv) It leads to improvement of social amenities thereby raising the standards of living of rural communities.

(v) It enables the rural population to sell products / raw materials to industries thus earning income.

(vi) It leads to diversification of the economy thus reducing the over reliance of rural community on agriculture.

(Any 4 x 2 = 8 mks)

(c) **Explain four factors that have contributed to the development of electronics industry in Japan.**

(i) Advanced technology / highly skilled labour has increased efficiency leading to mass production of high quality goods.

(ii) Highly developed sources of energy provide the power required in the industries.

(iii) A large population/high purchasing power provides a large local mket.

(iv) Availability of capital has enabled entrepreneurs to set up / expand the industries.

(v) The ruggedness of the land does not favour agriculture hence more concentration has been on industrialization.

(vi) Well developed transport network has enabled the movement of raw materials to the industries / finished products to the mket.

(vii) Availability of large external mket has led to more production.

(viii) Advanced scientific research led to adverse/high quality products.

(ix) Government emphasis on technical/science oriented education led to rapid development of idustries.

(x) The industrious nature/entrepreneurship of the Japanese has led to sustained/ high production.

(xi) A large population/high purchaing power provides a large local mket.

(d) **You intend to carry out a field study in a nearby post office.**
(i) **Identify two characteristics of a good hypothesis for the study.**
- It should be simple but not obvious.
- It should be related to the stated objective(s).
- It should be testable/measurable.
- It should be comparative / have independent and dependent variables.
- It leaves room for yes or no answer.

(Any 2 x 1 = 2 mks)

(ii) **State three advantages of using the interview method to collect data during the study.**
- It is possible to seek clarification for unclear responses / provide room for detailed information.
- It provides first hand information.
- It provides instant information.
- It enables one to gauge the accuracy of the responses.
- It allows for flexibility in seeking of information.
- It allows for extraction of information from people who cannot read/write.

(iii) **Give two challenges facing postal services that you are likely to find out during the field study.**
- Competition from more efficient service providers.
- Vandalism of communication equipment.
- Inadequate funds to maintain the services.
- Mismanagement of the organization.
- Obsolete technology / equipment.

GEOGRAPHY
K.C.S.E PAPER 2 2014
MARKING SCHEME

SECTION A
Answer all the question in this section

1. (a) give two uses of diamond

   - For making jewellery
   - For polishing metals
   - For making cutting instruments   (any 2 x 1 = 2mks)

   (b) Identify three problems facing diamond mining in south Africa
   - fluctuation of prices in the world mket
   - low mineral content in the ore
   - high cost of mining / processing / deep mines
   - reducing / depleting reserves
   - competition of skilled labour with other sectors of the economy
   - striking waters
   - dustup conditions   (any 3 x 1 = 3 mks)

2. (a) Apart from coniferous forest, name two other types of natural forests.

   - Tropical hardwood forests
   - Temperature hardwood forests
   - Mixed forests
   - Bamboo / montane forests
   - Tropical monsoon forest
   - Mangrove forests
   - Mediterrean forest   (any 2 x 1 = 2 mks)

   (b) state three characteristicts of coniferous which favour their exploitation
   - the trees are light in weight
   - the trees occur in pure stand
   - there is little undergrowth
   - the trees have straight trunk   (any 3 x 1 = 3 mks)

3. (a) use the map of east Africa below to answer question (a)
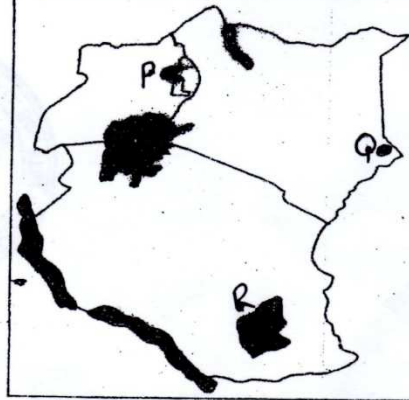
(a) Name the game reverves mked P, G and R.
   - P – Bokora
   - Q – Boni
   - R –Selous   (any 3 x 1 = 3 mks)

(b) State two factors which influence the distribution of wildlife in East Africa.

   - Vegetation variation / distribution influences the type of wild animals / birds found in an area
   - Drainage of an area influences the distribution / population of different types of species of plants / animals / birds
   - Human activities conserve / destroy wildlife habitats / wildlife influence the population / distribution
   - The soil of a place determines the plant life which influence wild animals / birds
   - The different types of climate / influence the distribution / type of plants / animals / birds.   (any 2 x 1 = 2 mks)

4. (a) give two reasons why the geothermal power has not been fully exploited in Kenya

   - The country faces a shortage of capital / inadequate capital required for exploitation
   - There is shortage of skilled personnel as the country relies on expatriaties
   - The country faces low level of technology which hinders exploitaition of the energy
   - Most of the potential sites are found in remote / inaccessible areas which makes it difficulty / expensive   (any 2 x 1 = 2 mks)

(b) State three causes of energy crisis in the world
   - there is a high demand for oil
   - there are embargoes / controls oil production by oil producing countries
   - there is de de-regulation of oil prices by the suppliers

- there is unequal natural pattern of crude oil occurrence
- there is political instability / wars in some of the oil producing countries

(any 3 x 1 = 3 mks)

5. (a) identify the two types of internal trade.
   - retail trade
   - wholesale trade   (any 2 x 1 = 2 mks)

(b) Give three factors that limit trade among the member states of the Common Mket
for Eastern and Southern Africa (COMESA)

- poor (transport infrastructure) slows / delays movement of goods / service
- difference in tarrifs / custom duties hinders trading activities
- difference in currence makes transaction difficult
- production of similar / duplication of goods limits trade.
- movements barriers limit free movement of people / goods / services
- political instability / insecurity

(any 3 x 1 = 3 mks)

Section B
Answer question 6 and other two questions from this section

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

(a) (i) identify the type of photograph shown above
    Ground general view / ground oblique   (1mk)
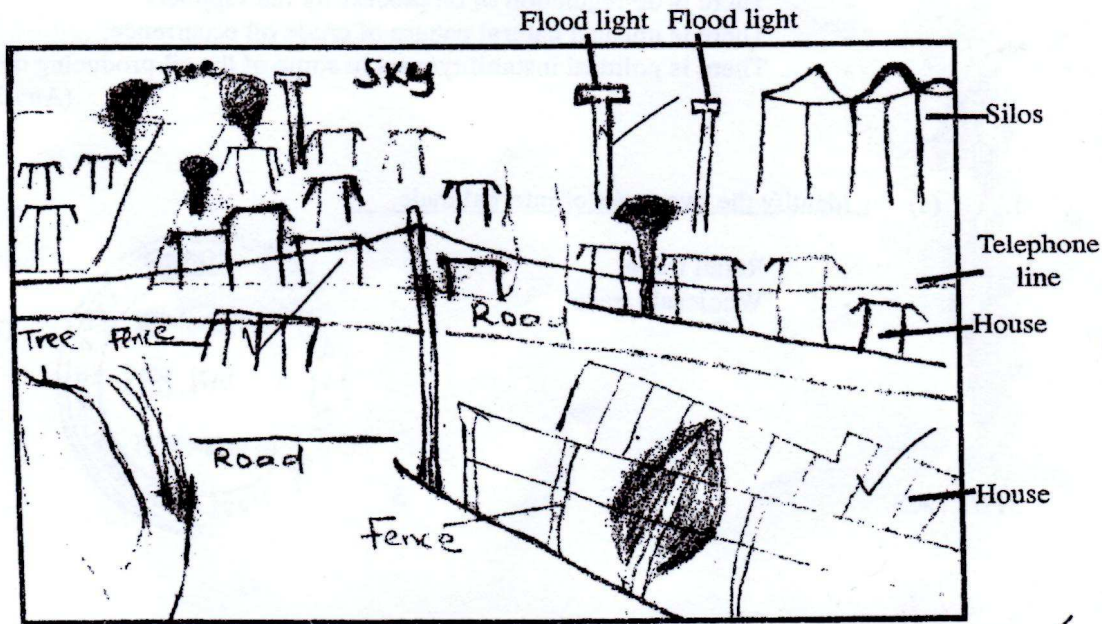
(ii) name the type of settlement shown on the photograph
     Informal settlement / urban / slum   (1mk)

(iii) what time of the day was the photograph taken
Afternoon / mid morning   (1mk)

(iv) draw a rectangle measuring 15cm by 10 cm. on it, sketch and label five human
features shown on the photograph.

- Drawing a rectangle correctly
- Roads
- Houses
- Silos / tanks
- Flood lights
- Telephone line
- Fences
- Planted trees
- Telephone posts
- Wall
- Car
- Quarry
- Cloth lines   (any 5 x 1 = 5 mks)

(b) Explain four economic factors that influence settlement
- Mining / fishing / water points attracts workers who settle near the mine fields
- Trade leads to development of mket centres thereby attracting many people
- Industrialization leads to creation of jobs hence encouraging many people to live near industries
- Transportation results leads to accessibility of services / goods thus attracting more settlement.
- Agriculture / irrigation schemes leads to siting of collection of centres hence development of urban centres / new settlements
- Administration provides security thereby encouraging settlement

(any 4 x 2 = 8 mks)

(c) Describe four negative effects of urbanization

FESTUS SEGERA'S SOFT COPY HUB: 0720121995

- Inadequate housing leads to development of slums / shanties in urban centres.
- there is traffic congestion in urban centre (due to poorly planned roads / traffic control systems
- unemployment in urban centres leads to high crime rate
- there is pollution in urban centres due in dumping of gabarge / disposal of waste into drainage systems / noise from vehicles and industries / emission of smoke
- From vehicles and industries
- there is strain on social amenties in urban centres due to rapid population growth
- there are street families in urban centres due to poverty
- cultural erosion due to cosmopolitant

(any 4 x 2 = 8 mks)

7. (a) explain three social factors that influence agriculture

- gender influences productivity as the produce will depend on effort of the gender involved
- some religious beliefs determine the type of livestock farming since they discourage rearing of certain animals
- The culture of a people determines the type of crops grown / livesctock kept in order to meet their dietary needs
- Land tenure system allows / limits individuals / communities to use the available land thus increasing / decreasing produce.
- The interaction between people leads to adoption of new techniques in farming

(any 3 x 2 = 6 mks)

(b) (i) describe the cultivation of oil palm from land preparation to harvesting

- the nursery is prepared where the oil palm seed are planted
- the land is cleared of vegetation ploughed
- the hole are dug with spacing of 9m x 9m
- the seedling are transplanted from the nursery into the holes
- weeding spraying is done regulary to protect the plants against pest / diseases
- the maturing trees flower / bear fruits after 3 – 4 years
- the mature / ripe fruits are harvested using a curved knife.

(any 7 x 1 = 7 mks)

(ii) Give three uses of palm oil
- as a cleansing agent in the tin industry
- making wine
- making margarine / cooking fat
- making soap
- making cardles
- making cosmetics
- used as lubricant

(any 3 x 1 = 3 mks)

(c) explain three reason why horticultural farming is encouraged in Kenya

- to earn foreign exchange in kenya which help to improve the ceconomy
- to create employment which enables people earn income hence improve their living standards
- to provide raw materials which support the development of related industries
- to enable farmers with small pieces of land earn high income
- to improve food supply in the country thereby ensuring food security

(any 3 x 2 = 6 mks)

(d) give three factors which favours beef farming in nyika plateau

- presence of watering points rivers / swamps
- there are large tracks of land, with natural grass
- the semi arid conditions of the area favour beef catte keeping
- There are ranching schemes which control grazing / spreading of diseases / pests.

(any 3 x 1 = 3 mks)

8. (a) explain four ways in which land is being rehabilitated in Kenya
   - by filing open pits / land scaping in order to ce used for farming settlement
   - by constructing terraces thereby reducing the speed of surface runoff
   - by planting trees on degraded land thereby protecting it against the agents of erosion
   - by construction gabions inorder to hold/trap the soil carried by water
   - by constructing dykes along river banks/dams across river in order to control floods
   - by applying manure/fertilizer on land in order to restore its fertility
   - by irrigating semi arid areas / during dry seasons in order to provide water required from crop growth
   - controlled grazing to allow regeneration of pasture / control erosion

(any 4 x 2 = 8 mks)

(b) (i) state two ways in which the salinity of polders is reduced in the Netherlands

- chemical are applied to lower salts in the soils
- fresh water is flashed to the soils to remove / dilute the excess salts
- reeds are planted to use up the excess salts.
- Continous pumping of water from podders

(any 3 x 1 = 3 mks)

(ii) explain four ways in which the zuyder zee project benefits the Netherlands.
   - Reclamation has increased the size of the land which is used for farming/ settlement
   - The reclaimed land has increased agricultural output hence more food / raw materials for industries
   - Damming created afresh water lake thus improving the supply of water for domestic / industrial use

   - It has led to employment of many people thus improving their standards of living
   - It has led to employment of many people thus improving their standards
   - Roads have been constructed thus improving transportation
   - Reclamation has created sceneries that have become tourists attractions thereby earning foreign exchange
   - The construction of the great dyke

(c) you intend to carry outr afield study on irrigation farming in mweaTebere Irrigation scheme

    (i) identify the two types of hypothesis you would develop for the study.
- alternative / substantive / positive
- null / negative
- question form   (any 2 x 1 = 2 mks)

  (ii) Name three crops grown in the scheme you are likely to identify
- Rice
- Maize
- Tomatoes
- Beans
- Vegetables
- Peas
- Water melons
- Onions
- Green grams
- Chellies.
                        (any 3 x 1 = 3 mks)

 (iii) give reasons why you would sample the area of study
- It is a cheaper study portions of the scheme
- It saves the amount of time spent on the study
- It brings out the details of the study
- It enables one to make generalized conclusion about the area under study
                        (any2 x 1 = 2 mks)

9. (a) define the term fishing
    It is the extraction / exploitation of aquatic animals / fish   (2mks)

 (b) Explain two ways in which each of the following factors negatively affect fishing in Kenya
   (i) agricultural activities
- poor methods cause soil erosion thereby leading to siltation of the lakes / rivers which hinders the movement of fishing vessels
- agrochemical used on farms are washed into the lakes /rivers thus polluting the water / kill fish
- abstraction of water from the river / lakes for irrigation reduces the level of the water thereby limiting the types of fish species
   (any 2 x 2 = 4mks)

   (ii) water seeds
- The growth of the weeds on the surface of the water harbours dangerous animal / predators thereby scaring away the fishermen

- The weeds growing on the water form a thick barrier / insulate the water thereby hindering the amount of sunlight required for the growth of planktons
- The weeds on the water choke the fishing vessels thus hindering their movement / carry away nets
- Weeds competes for oxygen with fish which leads to death of fish.

(c) use the map of North West-Atlantic fishing ground to answer question (c) (ii) and (ii)
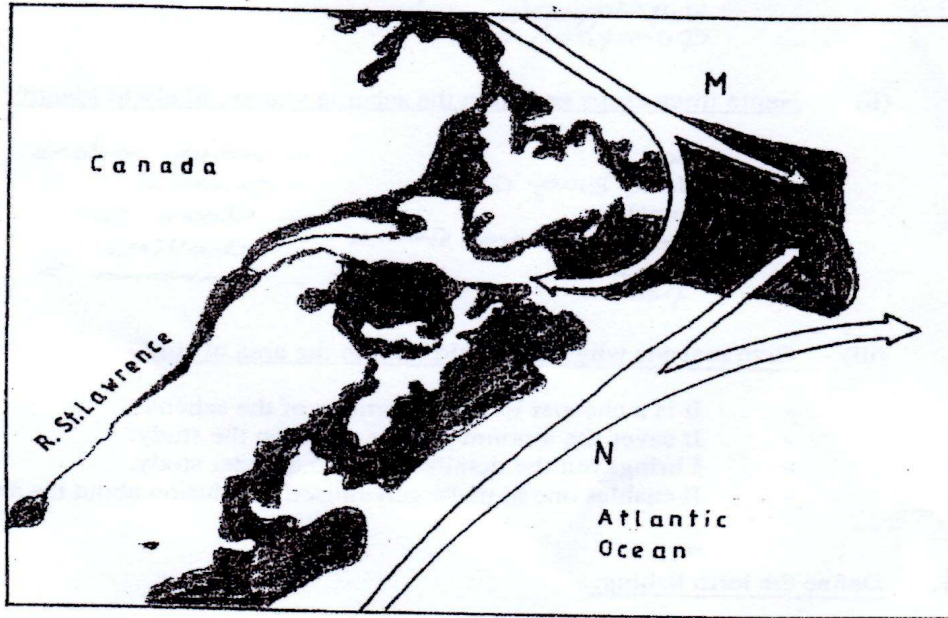
(i)   Give three types of fish species caught in North West-Atlantic fishing ground

-   Herring
-   Cod
-   Mackerel
-   Haddock
-   Menhaden
-   Lobsters
-   Halibut
-   Hake
-   Flounder
-   Whiting
-   Shell fish
-   Tuna
-   Sandiness any

                                                        (3 x 1 = 3 mks)

(ii)   Name the ocean currents mked

        M – cold Labrador current   (1 mk)
        N – warm gulf stream current   (1 mk)

(iii)   Explain two ways in which the convergence of ocean currents mked M and N influencing fishing.

- It causes upwelling of water which increases supply of oxygen / planktons required for growth of fish hence presence of a lot of fish / many species of fish
- The warm current raises the temperature of the ocean water making it ice free thereby encouraging fishing throughout the year
- The cold current carries minerals which encourage growth of planktons food for fish
- It causes cool conditions / temperatures thereby favouring the growth of planktons required by fish

(any 2 x 2 = 4 mks)

(d) give three differences between fishing in Kenya and Japan
- in Kenya there is low level of technology / mechanization while in Japan there is advance / efficient technology
- In Kenya fishing is done in small scale while in Japan fishing is done on large scale
- In Kenya there is a small domestic/external mket while in Japan there is large domestic / external mket
- In Kenya few people mket their fish through co-operatives while in Japan mket is mainly done through co-operatives
- In Kenya fishing is mainly done near the continental shelf/shallow sea waters /lakes while in japan fishing is mainly deep sea fishing
- In Kenya fishermen face stiff completion from foreigners while in Japan there is little competition from foreigners
- In Kenya there are few varieties of marine fresh species
- In Kenya fish eating is limited while in Japan is widespread
- In Japan there are many variety of fish species
- In Kenya there is limited research while in Japan there is extensive research

(any 3 x 2 = 6 mks)

10. (a) what is environmental management
- these are measures / controls taken to measure sustainable utilization of resources in a given environment / it is the planning and implementation of effective and proper utilization of the available resources in the environment.

(2 mks)

(b) (i) explain four negative effects of floods
- flooding leads to loss of life destruction of property thereby causing human suffering misery
- it causes destruction of vegetation on slopes thereby enhancing soil erosion
- it creates pools of water on the land surface forming breeding grounds for pests which causes diseases to people / animals
- it leads to water logging / teaching hence causing soil infertility

- it leads to destruction of aquatic habitats hence reduced fish production
- it causes flooding of settlements thereby leading to new temporary homes / displacement
- it destroys transport / communication network thereby hindering movement of goods / services
- floods wash away crops resulting in food shortages
- floods pollutes sources of water which causes water bone disease

(any4 x 2 = 8 mks)

(ii) State two measures being taken to control lighting
- by educating the masses on precautions to take / avoid sheltering under trees / avoid playing under rains
- by installing of lighting arrestors
- by launching sound rocket with electronic sectors in thunderstorm prone areas
- by spraying of carbon dioxide /carbon 4 oxide in the atmosphere to disperse the clouds

(any 2 x 1 = 2 mks)

(c) Explain the significance of conserving the environment
- to ensure effective utilization of the available resources inorder to avoid wastage / depletion
- to sustain resources needed by human kind for economic interest
- to reduce pollution which causes to animals/plants resulting into good health/prolonged life / reducing global warming
- to endangered plant / animal species preserving them for posterity.
- To preserve the scenic value/beauty of landscape /wildlife to promote tourism

- To protect the water catchment areas / wetlands in order to preserve water sources / maintain water cycle

(any 4 x 2 = 8 mks)

(d) your geography class carried out a fieldwork on floods along a river
   (i) Name two types of field work they could have used
     - field study
     - field excursion / field visit

(ii) give three advantages of studying floods through fieldwork
- The learners get first hand information
- The learners appreciate/interact with environment
- Helps breaking the classroom monotony/arouses interest
- The learners practice / acquire skills
- It enhances the learners visual memory   (any3 x 1 = 3 mks)