GEOGRAPHY 312/1 KCSE 2005
MARKING SCHEME.
SECTION A

1.a)
-The passing star theory (2mk)
- The Nebula cloud theory

b) -Troposphere
-Stratosphere
-Mesosphere
-thermosphere (4x1 mks)

2 a) E – Surface run off
F – Evaporation
G – Condensation (3 x 1 mks)

b) a watershed is a ridge / high ground that separates two or more river basins, while a catchments area is the entire area from which a river draws its waters.

3. a) -They occur in layers called strata
-They contain fossils
-They are not crystalline in nature but are composed of particles of pre-existing rocks.

b) – Rock salt
- Gypsum
- Flint
- Travertine / trona
- Limonite
- Hematite

4. (a) Mount Kenya
(b)
- Snow accumulate in pre- existing depression on the mountain side
- The snow action/ navigation/ alternating free-thaw action enlarges the hollow
- Plucking process steepens the back wall
- A deep armchair shaped depression called corries fills up with molt water forming a tarn (4 x 1 = 4 mks)

1. (a) This is a type of vegetation that grows without interference and modification by human activity.

(b) - Mediterranean vegetation is composed of shrubs/ thickets/ bush/thorn bush
- Grasses dry off, during summers drought and winter
- Some trees are deciduous
- Some plants have fleshy leaves
- Trees have thick rough barks/many plant have waxy/ spiny/ small leaves
- Plants have long tap roots
- Many plants are evergreen

SECTION B

6. (a)

(i) 1 cm represents ½ km or 1 cm represents 500m (1mk)

(ii) 298938 (1mk)

(iii) Thicket 3 x 1 = 3 mks)

(b) (i)

- Rivers
- Dams/ lake
- Water holes 2 x 1 = 2mks)

(ii)

Function	Evidence
- Health services center	- Dispensary
- Educational services	- School
- Religious services	- Church
- Commercial center	- Shop
- Transportation	- Roads

(Function ½ Evidence ½ x 4 mks)

(c) (i) & ii) – Cross – section – graph paper

(iii) Vertical exaggeration = $\frac{\text{Vertical scale}}{\text{Horizontal scale}}$

= 1/2000 ÷ 1/50,000 = $\frac{1}{2000} \times \frac{50,000}{1}$ = 25 times

(d) (i) Reasons for a reconnaissance

- In order to be familiar with the area before the field study
- To establish contacts possible respondents for the study
- In order to help in preparing methods for data collection
- In order to determine the cast of the study
- To identify possible problems likely to be faced and their possible solutions (4 mks)

(ii)

- Sandy soil
- Clay soils
- Loamy soils
- Cotton soil (2mks)

7. (a) H - bay
J- sand bar
K – Tombolo
L- Headland
M- Estuary (5 mks)

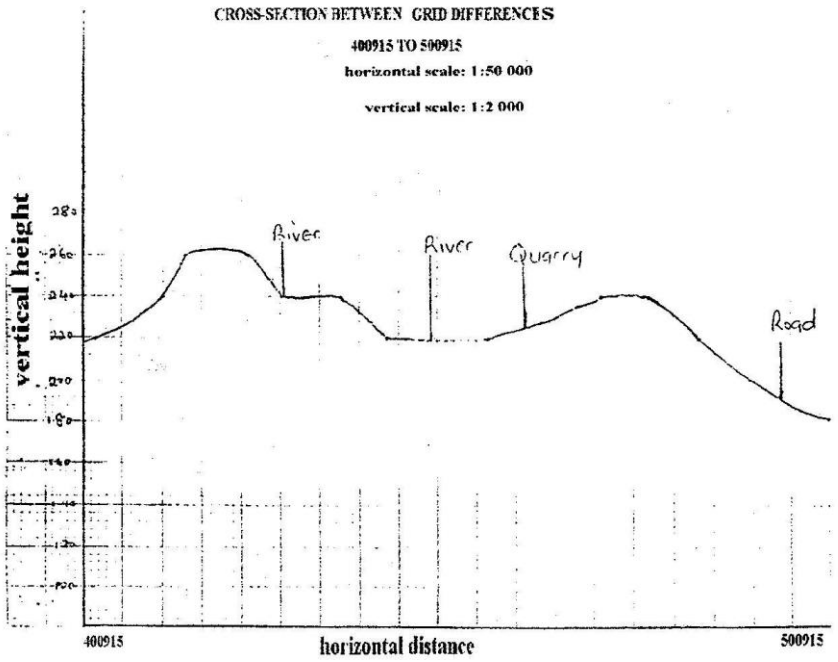
(b) (i)

- The shore should be gentle for deposition to take place
- The wave breaking must have a strong swash and weak backwash / be constructive wave

- The sea should be shallow towards the coastline/ shone
- The sea water should have a large load

(ii) Hydraulic action- the power of waves remove lose rock particles from the cliff/ rocks. The waves also enter.
Cracks / crevices of the rocks enlarging the crevices/ joints/ cracks by creating shock waves
Abrasion- the materials/ load carried by the waves scour coastal rocks making them smooth as they erode.
Attrition- the materials carried by waves constantly collide against each other and coastal rocks, thus, reducing in size.

Cross section between grid references 4000915 to 500915



Solution – the sea water dissolves and removes and removes materials in solution. This is common along limestone coasts (any 3 x 2 = 6 mks)

- Intense Compressional forces act upon rock strata resulting in a fracture along its axis
- The upper limb is pushed over the lower limb along the thrust plane
- Horizontal displacement of the limb occurs along the thrust plane

7. (a) Objectives
- To find out the type of depositional features along the Kenya coast
- To find out the factors influencing the formation of depositional features
- To find out the economic significance of coastal features of deposition
- To find out the process involved with formation of coastal features of deposition
- To find out the location of depositional features along the coast of Kenya

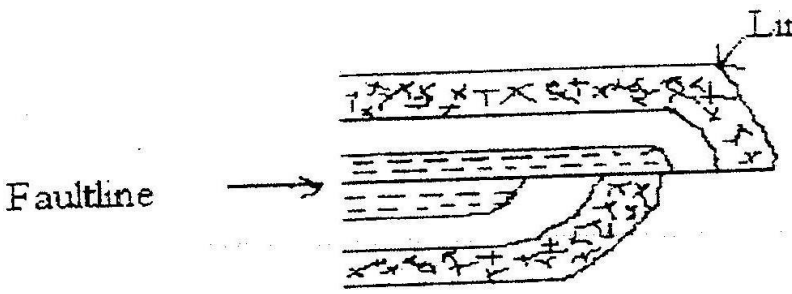
(5 x 1 = 5 mks)

(b)
- Making notes
- Taking photographs/ videos
- Filling in tables/ tallying
- Field sketching
- Drawing maps (sketch) mapping

8. (a)

i. Asia - Himalayas (1mk)
ii. North America - the rockies / Appalachians (1mk)
iii. South America- the andies (1mk)

(b)
- Cuestas
- Escarpments
- Intermountain basins/ plateaus
- Synclinal valleys



(4 mks)

Diagram & explanation = 6 mks

(c) Effects of fold Mountains of human activities
- Fold Mountains are water catchments areas. They trap rainfall which feed rivers that provide water for domestic use/ for irrigation/ for industrial use/ HEP generation
- Fold mountains are often forested and provide valuable timbers used in construction and building industry
- Some fold mountains have valuable deposition such a coal and petroleum
- Fold mountains attract tourists, thus earning countries foreign exchange
- Fold mountains influence transport systems either as barriers or as passes

(Any 4 x 2 = 8 mks)

(d) (i) – They would divide themselves into groups
- They would review secondary objectives and hypotheses for study
- They would formulate objectives and hypothesis for study
- They would conduct a pre – visit / reconnaissance to the areas under study

- They would prepare a working schedule for the study
- They would seek for permission from relevant authorities

(Any 3 x1 = 3 mks)

(ii) They would get first hand information about land forms in their districts
- It enables students to relate what has been learnt in classroom to what is in the field
- It allows students to use their observation skills to make conclusions
- It enables students to acquire appropriate attitudes towards the environment
- It breaks the classroom monotony for the students and teachers

(2 x1 = 2 mks)

9. (a) (i) Q- Polar cold climate/ tundra climate

(ii) Ocean currents R – Canary ocean current

S- Gulf stream (2 mks)

(b) T – Tropical equatorial climate

Characteristics
- Temperatures are high throughout the year at about 27^0C (5^0C)
- Experiences high rainfall of between 1,500mm and 2, 000mm evenly distributed throughout the year
- Experiences a double maximum rainfall region/ two rainy seasons caused by overhead sun twice a year
- The region also has high humidity due to heavy rainfall and high evaporation rates
- Major winds experienced are the south – East and North – East trade winds
- Experience low pressure all year round thus no distinct season.
- Rainfall is mainly convectional type usually accompanied with thunderstorms, highlands experience relief/ orographic rainfall (8mks)

9. (c) Factors influencing climate

(i) Altitude

- This is the height above sea level
- Lowlands are usually warmer than highlands because the atmosphere becomes thinner as altitude increases where the ground losses heat faster
- Atmospheric pressure decreases with increase in altitude. This is due to the weight of atmospheric air above highlands being less than in lowlands

(ii) Distance from the sea
- During hot seasons, coastal lands are relatively hotter than inland areas on the

same latitude due to the existing effects of the sea breezes. By the time the sea breezes reach inland areas they have adapted to the temperature of the land over which they are passing.

- Coastal lands receive more rainfall that the interior of continents. This is due to the coasts receiving moist winds from the sea but by the time the winds reach inland areas they are usually dry. (3 x 2 = 6 mks)

(d) (i)
- The site should be flat and free from flooding
- It should be open to the surrounding landscape
- It should be far from obstacles such as tall trees and buildings
- It should be secure and free from intruders (2 x 1 = 2 mks)

(d) (ii) Stevenson screen
- Painted white to help in reflecting heat from the sun, thus maintaining shade/ room temperature in the screen (2mks)
- Has louvers to allow free circulation of air/ keep the screen well ventilated (2mks)

GEOGRAPHY 312/2 KCSE 2005
MARKING SCHEME

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

   (b) Settlement patterns marked
   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 marketing skills/ strategies
   - Inadequate security (Any 3 x 1 = 3mks)

3. (a) (i) The H.E.P stations marked
   S- Masinga (1 mk)
   T – Kindaruma (1 mk)
   (ii) The proposed H.E.P station marked
   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

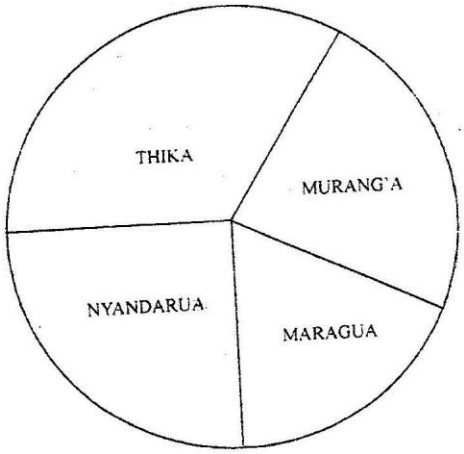
industries
- Leads to reduction in export of agricultural commodities in the farmers income (any 4 x 1 =4 mks)

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)

A 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 marked

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 market (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) Market

- In Canada wheat is for both local and export markets while in Kenya wheat is for local market
- Canada has a larger and reliable local market than Kenya
- In Canada wheat is marketed by industries/government while in Kenya its marketed 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 market.

iii) Market

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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
-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 market will attract new investments from local and foreign sources which will lead to expansion of industries/more earnings
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-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 market.
-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)