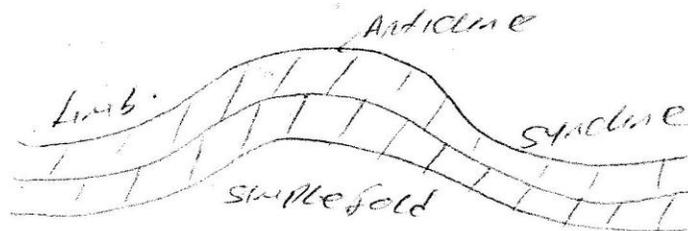


**GEOGRAPHY PAPER 312/1 K.C.S.E, 2003
MARKING SCHEME.**

1. a)
- The amount of stream discharge
 - The amount of load
 - The composition/size of sediments/loads
 - The slope / gradient of the landscape
 - The rock type
- b) (i) it is the renewed erosive activity of a river
(ii)
- River terraces
 - Incised meanders
 - Knick point
 - Valley within a valley
 - Water falls/rapids
- 2 a)
- An area of limestone
 - Thick layers of calcium carbonate rocks
 - Moderate to abundant rainfall
 - A low water table
- b)
- The areas are rocky
 - They have thin soils
 - They have poor vegetation
 - There is inadequate water supply
- 3 a)
- Nature of materials
 - Extent of saturation /amount of rainfall
 - The angle of slope/gradient of the land
 - Human activities/ mining /building
 - Occurrence of earthquakes/volcanic eruptions
- b) (i)
- Rock fall
 - P- cliff face/steep slope
 - Q-Talus/ talus creep/scree
- 4 a) (i)



- b) Atlas
Cape Ranges

5. a) (i) Granite - Gneiss
(ii) Clay - slate
- The coastal plain is a lowland, which has facilitated deposition of sediments
 - The shallow continental shelf has conducive environment for the formation of coral rocks
- 6 a) (i) -2000m (2000-2019m)
(ii)
- Contours
 - Trigonometrically points
 - Depression symbol (lake Nkunga)
- (iii) -248⁰ +/- 1”
- b)
- The high density of settlement shows that there is market/high demand for goods
 - The high density of road network provides means of transportation for goods
 - The variety of economy activities show that the area is productive with encourages trade.
- d)
- J - A plantation
 - K - A lake/sacred lake
 - L - A river/river munyi
- (i) 7.2 +/- 0.1 km
(ii) Scrub scattered trees
(iii)
- Use of questionnaires
 - Interviewing
 - Reading from secondary sources
 - Taking measurements
 - Taking photographs
 - Sketching
- (iv)
- Report writing
 - Class discussions
 - Displaying collected specimen
 - Asking/answering questions
 - Reading more about the topic
 - Analyzing photographs/tape recorded work
 - Rejecting and accepting hypothesis
- 7 a) i) It is mass of moving ice
ii) Valley glaciers are formed on highlands above the snow line while ice sheets are found in lowlands in the high latitude regions/valley glaciers are confined in valleys while ice sheets cover extensive landscapes
- b) i)

- D- Truncated spur
- E- ribbon lake
- F- glacial trough/U-shaped valley

ii)

- Ice accumulates in several cracks/hollows on mountain sides
- Ice exerts pressure on the cracks /hollows
- Plucking action of ice enlarges the hollow allowing more ice to collect in them
- Freeze-thaw action leads to expansion of cracks/hollows making them large basins
- Moving ice plucks off loose rock materials from the basin thus enlarging them further
- Nivation eats into the back wall of basins making them recede into the mountain side.
- Steep sided knife edged ridges are formed separating the basins
- Three or more of these ridges/arêtes converge at the mountain top forming a jagged peak known as a pyramidal peak/horn.

c)

- the warm glaciated valleys are suitable for livestock farming/cultivation
- Glacial upland areas form magnificent features that encourages secretion and tourism
- Glaciated mountains encourage the growth of forests hence lumbering is practiced
- Waterfalls formed in glaciated uplands provide suitable sites for hydro-electric power production
- Corrie lakes/tarns offers suitable areas for trout fishing
- U-shaped valleys form natural route ways
- Flood coastlines form deep well sheltered natural harbours/good fishing grounds.

d)

(i)

- Climbing the mountain is difficult due to the rugged terrain
- The features are found far from schools/settlements
- Time may be inadequate
- The study may be hindered by poor weather conditions/rain/low temperatures
- The thick forest/vegetation cover may be difficult to cross/may have dangerous wild animals
- It would be expensive to prepare for the kind of field study
- By dividing it into parts
- By observing and identifying the features in each part of the photograph
- By drawing sketches of the feature observed
- By labeling the features observed

8

- a) i) X - $31 - 28 = 3^{\circ}\text{C}$
 Y - $12 - 12 = 9^{\circ}\text{C}$

(ii)

- The station received low rainfall
- Rain falls throughout the year
- The wettest month is June/the driest month is February

- Summers are relatively dry while winters are relatively wet
 - Most rain falls between May and August
 - The station experiences warm summers and cool winters
 - Temperature's are moderate throughout the year
- c)
- i)
- water surface/sea is heated intensely by conduction
 - Maximum heating occurs in the afternoon
 - Moisture laden air rises in conventional currents
 - As the warm air rises, it is cooled
 - The moisture laden air condenses at high altitudes
 - The condensed water vapour forms clouds which develop into cumulonimbus clouds with time
 - The clouds give rise to heavy/torrential rain accompanied by thunder and lightning and sometimes hail stones
- ii) The torrential rains cause floods which displace people
- The hailstones destroy crops
 - The strong winds blow off roots of houses/ uproot trees
 - Lightning strikes causing deaths of people and animals

9. a) i)

- Deflation
- Abrasion
- Attrition

ii)

- Suspension

The fine dust particles are lifted and suspended in the air
Eventually they are blown away by wind currents

-Saltation

-Larger fragments/sand particles are lifted from the ground by eddy action

-They are moved in a series of hop(s)/ along with wind currents

- Surface Creep

The heavy materials/small stones. Pebbles are dragged along the ground by wind currents

b) (i)

- A pre-existing depression formed through faulting or otherwise is exposed to wind erosion
- Wind eddies removes unconsolidated materials through deflation
- As deflation continues, the depression is deepened and enlarged
- The process of deflation is aided by weathering
- With continued deflation, the level of the water table is reached.
- After oozes out of the ground and collects into the depression to form an oasis

(ii) How zeugens are formed

- Zeugens are formed in desert area where alternating horizontal layers of hard and soft rocks occur
- The top layer of hard rock is jointed has cracks
- Weathering opens up the joints deepening them to reach the soft layer of rocks
- Abrasion continues, furrows are formed and gradually widened.
- The hard/resistant rock forms ridges separating the furrows
- This process creates a ridge-furrow landscape.

C(i)

- Reading from relevant written materials
- Assembling relevant tools/ equipment / materials for the study.
- Formulating hypothesis / objectives
- Grouping / appointing group leaders
- Planning a schedule of activities
- Carrying out reconnaissance
- Studying / drawing a route map
- Identifying methods of data collection.

ii)

- Sparse vegetation / large patches of bare soil
- Sparse settlements
- Presence of drought resistant crops
- Stunted trees / tufts of grass
- Dust storms / sand storms
- Evidence of wind erosion.

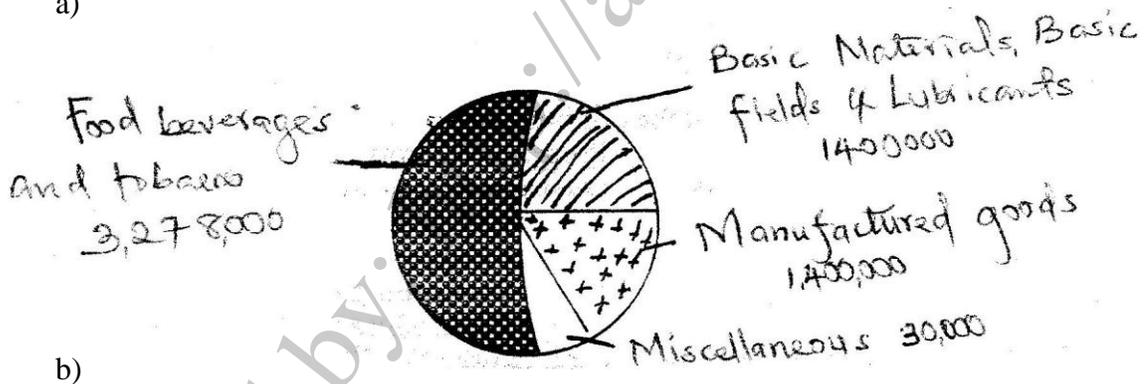
iii)

- Planting of trees
- Controlling overgrazing
- Avoiding bush fires
- Controlling tree cutting
- Practicing appropriate methods of cultivation / planting cover crop / irrigation / mulching / terracing strip cropping / contour farming.

**GEOGRAPHY PAPER 312 / 2 K.C.S.E 2003
MARKING SCHEME.**

1. a) It is the process whereby an increasing proportion of the total population in a country settles/concentrates in town / the process through which towns or cities grow in numbers and size / a process by which a population is transformed from rural based agricultural lifestyles to urban based non agricultural lifestyle.
- | | New York | Nairobi |
|----|--|--|
| b) | <ul style="list-style-type: none">• It is a sea port• It is a state capital• It is an international commercial commercial financial centre | <ul style="list-style-type: none">it is an inland portIt is a national capitalIt is a national centre. |
2. a)
 - Through irrigation
 - Through controlling pests
 - By introducing drought resistant crops
 - By using fertilizer/ manure
 - By a forestation
- b)
 - Floods were controlled
 - Pests waterborne diseases were controlled
 - There was an increase in the land for agriculture/ more land was made available for agriculture.
 - Better farming methods were introduced
 - There was increase in the employment opportunities.
3. a)
 - Temperature ranging from 14°C – 26°C
 - High rainfall – 1000mm – 2030 mm per year.
 - Well – distributed rainfall throughout the year.
 - Gently sloping landscape – 1500 – 2300 M above sea level.
 - Deep well drained soils
 - Volcanic soils.
- b)
 - The crop is attacked by pests and diseases i.e. pests – lady bird/Thrips/ aphids diseases – CBD, Leaf rust / root rot.
 - Fluctuation of coffee prices in the world market.
 - Poor infrastructure
 - Mismanagement of coffee co-operatives
 - Inadequate rainfall
 - Inaccessibility to credit / inadequate capital.
 - Expensive prices of inputs e.g. fertilizer, pesticides
 - Delayed payments

- 4 a)
 - Poor marketing strategies
 - Low payments.
- b)
 - To ensure that there is supply for present and future generations
 - To maintain hydrological balance.
- 5 a)
 - By reducing surface runoff which ensures that rainwater seeps slowly into the ground.
- b)
 - To preserve the natural beauty
 - To conserve wildlife plants and animals
 - To promote tourism / provide for recreation
 - Provide an environment for education and research
- 6 a)
 - Sandy beaches / coral reefs
 - Sunny / warm climate / warm conditions
 - Historical sites
 - Traditional culture of the people / i.e dancers / shrines / Kaya forest/ craft.
 - Water sports.



- b)
 - Encouraging development of Jua kali industries which do not require importation of heavy machinery // so that Kenya is also able to export.
 - Restricting the importation of luxury items through taxation
 - Establishing/ providing import substitution industries to cut down on importation of some commodities.
 - Developing alternative sources of energy in order to reduce importation of fuels / petroleum.
 - Encouraging the production of high quality manufactured goods for export in order to earn higher income // high prices // production of high quality agricultural products.
 - Diversifying the agricultural export base to enable the country to have a variety of exports.
 - Opening new markets to avoid dependence on the traditional partners.
 - Popularizing trade to increase earnings from the invisible trade.

- c)
- The imported industrial inputs have led to the growth of manufacturing industries in the country.
 - Demand for Kenya's exports have led to the expansion of the industries that produce those goods.
 - Transport and communication network in Kenya has been improved to facilitate the movement of trade goods // modernization of the facilities for handling goods at the port of Mombassa.
 - Taxation of commodities and services rendered has generated revenue for the country.
 - Employment opportunities have been created in the manufacturing service industries that handle imports and exports.
 - Trade has enhanced cooperation between Kenya and the trading partners.
 - Trade encourages specialization which leads to production of high quality goods in some industries in Kenya, thus enabling the country to earn higher income.
 - Kenya is able to import what it needs from other countries to satisfy its people.
 - Kenya gets a ready market for its surplus goods
 - Kenya has foreign exchange which enables it to import goods from other countries/ credit foreign exchange.

7

- a)
- i)
- National census head count
 - Sample survey
 - Vital statistics / registration of birth / death / marriages / migration.
- ii)
- The size of the population
 - The different age cohorts(age groups)
 - The proportion of males to females.
 - The composition by sex.
 - The proportion of the youthful/working / ageing/ dependency ratio.
- b)
- The population of Kenya has a large number of young people below 20 years of age while Sweden has an ageing population.
 - Kenyans population has a lower life expectancy while Sweden has a lower life expectancy.
 - Population birth rate in Kenya is high while it is low in Sweden
 - The fertility rate in Kenya is high while in Sweden
 - The population growth rate is high in Kenya and low/negative in Sweden.
 - A high percentage of the population in Kenya live in rural areas while in Sweden most people live urban areas (the difference must be complete)
- c)
- Pressure on land makes people buy/look for land elsewhere and move to settle there.
 - People move from the rural areas makes people to move to safer places

- Setting up of government development projects cause displacement of people who are settled elsewhere such projects attract settlements in those areas (settlement schemes)
- Natural hazards force people to migrate to other areas for safety
- Pastoral communities migrate from one rural areas to another in search of pasture / water for their livestock
- Change in land tenure system/ and disputes cause people to move and settle elsewhere.

d)

- The rate of population growth is higher than the rate at which job opportunities are generated leading to high unemployment.
- The high demand for social amenities caused by the high population growth rate leads to congestion in schools /hospitals/ housing/transport facilities.
- The large number of youthful population create a high dependency ratio which causes slow economic growth.
- The high demand for food caused by the high population growth rate has led to food shortage
- The high demand for agricultural land cause land fragmentation. //
- The large number of poor people /unemployment lead to temptation to commit crime/high crime rate

8.

a)

- Tobacco processing
- Soap manufacturing
- Foot wear making
- Vegetable chemical products making/ pyrethrum processing
- Textile manufacturing
- Saw milling/pulp/paper making
- Leather tanning

b)

(i)



(ii)

- Thika
- Nairobi
- Mombasa

- c) (i)
- Large-scale importation of second hand clothes has reduced demand for locally produced textile products/second hand clothes are cheaper than the locally produced new clothes.
 - There has been a decline in the production of cotton which has led to limited supply of raw materials for the textile industry.
 - Mismanagement of textile factories has led to closure of such operations textiles from other countries instead of selling produced ones.
 - Belief that imported garments superior to locally produced ones has reduced demand from local garments
 - Decline in the economy has discouraged investors who would set up textile industries in Kenya.

- (ii) **Water pollution**
- Treating the industrial waste to reduce the negative impact particularly industrial effluents/enforcing environmental laws on the use of improved technology for industrial efficiency
 - Recycling wastes in order to reduce the industrial waste turnover.

Rural urban migration

- Improved agriculture to create employment in rural areas.
 - Encourage growth of Jua kali industries in rural areas to promote self employment
 - Decentralize industries so as to control the number of people moving to industrial centers in search of employment.
- d)
- Availability of adequate financial resources which have helped in the setting up and expansion of the industry.
 - Presence of large population, which provide a large domestic market for electronic goods/availability of large external markets.
 - Government policy on industrialization has led to rapid development of electronic industries.
 - The highly developed sources of power encourage growth of electronic industries.
 - Advanced technology/research as promoted efficient methods of production/high quality goods competitive in the world market.
 - The numerous sea ports ease the importation of raw materials and importation of finished electronic goods
 - Japan has skilled industrious workforce, which enhances efficiency in production.

9. a) (i)

- Trawling
- Purse-seining
- Drifting /gill net
- Lining /Line /hook and line/longline

(ii)

- Salmon
- Mackerel
- Herring
- Haddock
- Flounder
- Tuna
- Sardine
- Pilchard

(iii)

Indented coastline

- These provide secure breeding grounds for fish because the bays are sheltered from the sea waves.
- The sheltered bays provide suitable sites for building fishing ports/fish landing sites

Ocean currents

- The meeting of the cold and warm currents cause upwelling of the ocean water which bring plankton/fish food to the surface.
- Colder currents provide ideal temperature for survival of numerous species of fish/growth of planktons.

b)

- To increase the fish number/ restock over fished areas by breeding fingerlings in fish farms and then release them into the sea/induced fish regeneration.
- Standardizing the size of fish nets used in fishing to ensure that only the mature fish are caught.
- Restricting disposal of untreated waste into the sea to ensure that the water remains clean for survival of fish.
- Enforcing the international conventions in order to protect the endangered fish species
- Licensing fishermen to control their numbers and ensure that there is no over-fishing
- Restricting fishing to specific seasons to allow for breeding and maturing of fish/ ensuring natural regeneration of fish..

c) (i)

- Freezing
- Salting
- Canning
- Sun drying
- Smoking

(ii)

- The occurrence of strong wind lead to high waves causing accidental drowning/destruction of fishing vessels and nets
- Most fishermen have poor fishing equipments/ motorboat engines which are inefficient. This leads to a low catch delayed landing.
- Fishermen lack appropriate storage/preservation facilities lead to low catch
- Presence of floating vegetation/water hyacinth entangles and tears the fishing nets, which is a loss to the fishermen. // hunters movement of fishing boats.
- Parts pf the lake shores are swampy/marshy which makes the landing of the catch difficult
- Insecurity // theft of fish and fishing equipment discourages the fisherman.

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