HOMA BAY /SUBA FORM FOUR DISTRICT MOCK- 2007 312/2 GEOGRAPHY PAPER2

MARKING SCHEME

SECTION A.

1. a) <u>Common market organizations in Africa</u>

- EAC
- COMESA
- PTA
- ECOWAS
- SADCC

Any $2 \times 1 = 2mks$

b) <u>Negative impacts of trade liberalization in Kenya</u>

- Decline in commercial production of some crops e.g maize, sugar-cane because of cheap imports
- Reduction / elimination of customs has reduced revenue to the government.
- Reduced demand for local raw materials by some factories.
- Decline in locally manufactured goods due to importation of cheap goods.
- 2. a) What is fish farming?
 - It is the rearing of fish in ponds.

b) Traditional fishing methods

- Use of baskets
- Traps
- Use of herbs
- Use of barriers
- Harpooning

Any $2 \times 1 = 2mks$

c) Reasons why the Kenya government encourages fish farming.

- It occupies less space compared to other activities.
- It creates job opportunities
- Some of the fish from the ponds are exported to earn foreign exchange.
- It can lead to the development of fish related in industries.
- Its free from inert- territorial conflicts and disputes.
- It contributes to the supply of animal proteins.

Any $2 \times 1 = 2mks$

3. a) **Problems facing Kenya's horticultural industry**

- Pests and disease often destroy the crops.
- Inadequate refrigeration facilities may lead to reduction of quality.
- Poor organization of the marketing system
- Inaccessibility especially during rainy seasons i.e roads get muddy.
- High costs of production due to high input prices.
- High freight charges reduces profit levels.
- Stiff competition by other producers e.g Israel and Netherlands.

Any 2 x 1 2mks

b) <u>Benefit of Horticultural farming to the economy of Netherlands.</u>

- Provides employment to many people
- Encourages reclamation of land from the sea.
- Provides food and flowers to the population
- Earns the country enormous foreign exchange from horticultural

4. Factors which have contributed to the growth of Rotterdam as a major sea port

- Strategic location on the Rhine enables it to receive goods from many communities of Europe for export.
- Its industrial function, which offer great diversity in the town of oil refineries and other petrol- chemical industries.
- Large hinterland from the Ruhr Area that makes Rotterdam a busy port all year round.
- Modern facility available- the Euro port projects which led to facilities like the container terminal (Rifu poort) for handling imports and exports.
- Deepening of the habour which widen the river Rhime to facilitate navigation.

Any $5 \times 1 = 5mks$.

5. a) Characteristics of stage 1

- High birth rates
- Declining death rates.
- High population growth rate.

Any $2 \times 1 = 2mks$

- b) Reasons for the high death rates in the traditional stage.
- Inadequate medical care.
- Rampant / wide spread diseases.
- Malnutrition / inadequate food supply.
- Frequent wars.

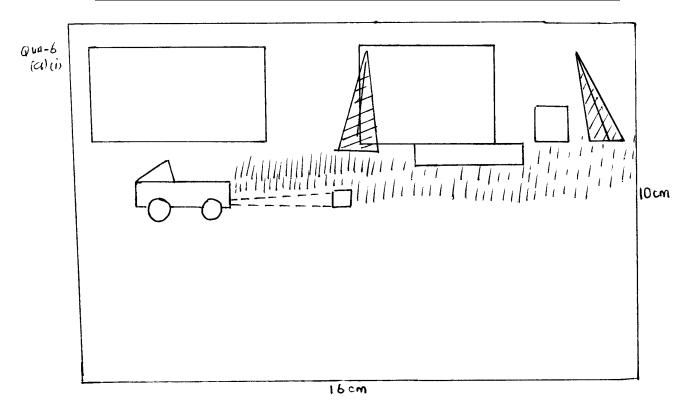
Any $3 \times 1 = 3mks$

SECTION B

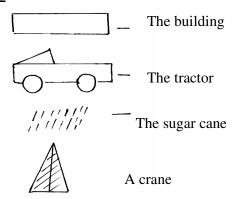
6. a) i) Ground close – up

1mk

ii)A SKETCH OF THE PHOTOGRAPH SHOWING SUGAR CANE ROCESSING



Key



iii) Two districts outside Nyanza province where the activity on the photograph is carried out.

- Bungoma
- Kakamega
- Trans-nzoia
- Butere Mumias.

Any $3 \times 1 = 3mks$.

b) Physical factors that favour the growth of crop in the photograph.

- High temperature / 20° c - 30° c thought the year.
- Deep, well drained fertile soils.
- Requires, clay soil/ Black cotton soil.
- Annual rainfall of at least 1000mm
- Gently sloping or flat land to allow mechanization.
- Dry, sunny weather for ripening or harvesting.

Any $3 \times 1 = 3mks$

c) i) <u>Uses of the crop in the photograph after processing.</u>

- Soft drinks
- Domestic consumption / Beverages.
- Confectioneries/

Any two $2 \times 1 = 2mks$

ii) Problems facing sugar – cane farmers in Kenya today.

- Pests and disease. Pests such as white seales, white graps and termites coupled with diseases such as smut, ration stunting, yellow wilt and leaf spot destroy the cane and stagnate growth, lowering the yields.
- Unreliable weather/ prolonged drought delays cane maturation and this discourages farmers.
- Fire outbreak normally destroy sugar cane farms hence great loss to the farmers.
- Low cane prices by the factory hence discouraging the farmers.
- Delayed cane harvesting and delivery to the factory leads to drying / loss of weight of the cane leading to low returns to the farmer.
- Delayed payment after cane delivery kills the morale of the farmers.
- High inputs prices lowering the farmers returns.

Any 4 explained pts $4 \times 2 = 8mks$

d) Sugar cane production from processing the time it is ready for marketing.

- Juice extraction:- the cane is cut with revolving knives. It is then passed to the roller which squeezes out the juice.
- **Clarification**: The juice is clarified by adding lime.

The juice is then passed over the filters to remove any impurities.

- **Evaporation**: The water content in the juice is gotten rid of by boiling in evaporators.
 - The juice converts into a thick syrup.
- **Crystallization**: The syrup is finally concentrated in a vaccum pan where it results into sugar crystal (massecuite)
- **Centrifuging-** The massecuit is put into a centrifugal machine which consists of a perforated drum which rotates.
 - The sugar crystal remains within the drum but the molasses drains out.
- The sucrose crystals (sugar) are then dried, cooled, bagged and weighed ready for marketing.

 Any 4 steps in order 4 x 1 =4mks
- 7a) i) The port marked N Quaebec *1mk*
 - ii) Water fall marked M Niagara 1mk
 - iii) Lakes

b) Benefits that Kenyans enjoy due to new regulations in "matatu" transport

- Reduced road accidents due to over speeding saving life.
- Exploitation of commuters by overhanging / higher fares has been controlled.
- Drunk drivers / Drug addicts have been removed from the roads increasing safety of our roads.
- Fairly disciplined conductors who handle the passengers politely and with respect.
- Displaying of the drivers photograph has minimized cases where unqualified drivers or learners driver passengers and cause accidents.
- Some comfort while travelling is enjoyed by passengers, and safety devices such as the seat belts minimize deaths incase of accidents.

Any $3 \times 1 = 3mks$

c) Ways in which containerisation has improved the handling of goods at a port.

- Saves time and labour involved in handling a large number of small packages into a ship.
- Goods are protected from damages and the risks of theft is minimized as containers do not show the contents.
 - -Enables the stocking of odd shaped cargo and vehicles.
- Special containers can be used to carry special and dangeraous goods e.g chemicals, oil e.t.c.
- It provides cheap and simple movement of goods because they are fitted with devices that assist in handling.

 $Any \ 2 \ x \ 1 = 2mks$

d) i) Factors that have hindered the development of river transport in Africa.

- Most African rivers are narrow and shallow therefore dredging to provide cheaper and wider water is expensive.
- Most river in Africa are seasonal
- Some rivers are too short to be used as means of transport.
- Presence of water fall / rapids in some rivers makes them impassable by vessels.
- Presence of floating vegetation/ sudds make it difficult for vessels to sail through.
- African countries have inadequate capital to develop river transport.
- Most rivers in Africa pass through unproductive areas and therefore uneconomical to develop the rivers.
- In adequate capital for river transport development.

- There is stiff competition from other means of transport such as roads, railway, air, e.t.c.
- Some are infected with crocodiles and hippos, making them dangerous.

Any $3 \times 1 = 3mks$

ii) <u>Contributions of the St. Lawrence sea way to the economy of Canada and the USA.</u>

- Provision of employment opportunities to the people due to the transport and industrial establishment in the region.
- HEP now available for domestic and industrial use.
- Led to the development of towns and villages along the seaway e.g Montreal and Quebec towns.
- The lakes and seaway are a source of fresh water needed for domestic use in the numerous cities around them and in industries.
- Cost of transportation especially for the bulky goods e.g iron, coal, grains, has been greatly reduced.
- There has been increased volume of trade passing through the sea way.
- Source of revenue foreign ships pay toll charges which go to the governments of USA and Canada.
- Due to waterfalls like Niagra on the St. Lawrence sea way, it acts as a tourist attraction.
- It has encouraged the growth of ports e.g Toronto.

Any 4 explained $x^2 = 8mks$

8. a i) Name

X – Eldoret

Y – Webuye

Q – Nakuru

ii) Panpaper mill – Webuye

b) i) Benefit of industrialization to the Kenyan economy:

- Employment opportunities- industries leads to more jobs opportunities to the people increasing the level income generation in economy.
- Self sufficiency- Many industries provides consumer goods, textile and other necessary commodities hence reducing dependence on imports from other countries.
- Foreign Exchange- Increased industrialization leads imports substitution, thereby saving vital foreign exchange.
- Diversification of the economy- Many industries help to diversify an economy and reduce overdependence on agricultural as the only means of livelihood. This stabilizes a country's earnings.
- Encourages utilization of locally available resources, creating further employment locally.
- Earning foreign exchange through exporting of her industrial products to other countries
- Improved infrastructure through the development of transport and communication networks, power and water supply to serve the established industries.
- Increased agricultural production.
- Many agricultural based industries get their raw materials from farming activities in Kenya.
- Improved balance of trade- industrialization reduces over- reliance on imported products, hence a favourable balance of trade.

 Any $4 \times 1 = 4mks$

ii) Steps taken by the Kenya government to encourage industrialization.

Improving transport and communication network in rural areas.

- Provision of cheap land for industrial sites.
- Offer a tax rebate. That is reduction of import tax, income tax and local rates.
- Giving subsidy by providing part of the capital for industries located in rural areas.
- Guaranteeing market for the products.
- Encouraging and supporting rural electrification programmes.
- Charging low interest low interest on bank loans to industrial investors.
- Encouraging foreign investors (entrepreneurs) to come and invest in Kenya's industrial sector.
- Maintaining peace and stability necessary for industrial activities and trade.

Any $3 \times 1 = 3mks$

c) Explain how the following factors influence location and development of industries

i) Water

- Processing industries such as coffee pulping and sugar cane processing require a lot of water. Hence are located near large permanent river, lake or other water bodies.

2 mks

ii) Market

- Large urban centres provide already market . market for finished products since people's purchasing power is high. Hence large industrial areas are usually located in urban areas.
- Industries which manufacture perishable and fragile products are located near their markets to minimize loses due to breakages and rotting.

Any 1 expl. X = 2mks

iii) Industrial enertia.

- An established industrial region usually has a well developed transport network, lacking in other areas.
- Availability of technical and experienced labour / workers also leads to industrial inertia.

Any 1 expl x2 = 2mks

d) <u>Factors that have influenced the location of iron and steel industry in the Ruhr region of Germany.</u>

- Availability of coals, iron ore in the region and later imported limestone provided raw materials.
- Presence of navigable river Rhine providing cheap transport for the bulky raw materials and finished products.
- Presence of other industries in the region such as food and textile industries provide industries services.
- Rich merchants / companies provided industrial services required for the establishment of industry / imported petroleum and provided power required.
- River Rhine and its tributaries provided water required for cooling in the industry.
- The local population had acquired skills on iron working, that formed the basis of iron and steel industry.
- Availability of ready market in Western Europe / local market.
- Central geographical position having direct connection with all parts of Europe, France and Sweden.

Any 4 explained x2 = 8mks

9. a) Differentiate land reclamation and land rehabilitation.

- Land reclamation is the conversion of waste land / unproductive land into productive farm land.
- Land rehabilitation is the process of recovering of land which has been misused and destroyed through man's activities.

2 mks as a whole

- b) Method of land reclaimation and rehabilitation and rehabilitation in Kenya.
- Drainage of swamps

- Irrigation of dry land
- Application of manure.
- Planting of drought resistant crops
- Eradication / control of insects / tsetse flies.
- Afforestation.
- Filling up of quarries/ mines / develictlands.

Any 4 explained x = 8mks

- c) i) Physical factors that led to the establishment of Perkerra irrigation scheme
 - Presence of River Perkerra
 - Gentle relief / sloping allowing the natural flow of water to the field by gravity.
 - Available soils rich in salts.
 - Available extensive land
 - Aridity of the area suitable for irrigation.

Any $3 \times 1 = 3mks$

- ii) <u>Crops grown at Perkerra irrigation scheme.</u>
- Maize
- Pawpaw
- Onions
- Water melons
- Chillies. Any

Any $2 \times 1 = 2mks$

- D i) Differences in Land reclamation in Kenya and in the Netherlands.
 - Simple ways of reclaiming the land are used and in a small scale in Kenya, while in the Netherlands advanced methods of reclaiming polders are used.
 - In Kenya dykes are built to keep away water from rivers and lakes, while in the Netherlands dykes are built to control water from the sea.
 - There is low market for irrigated crops in Kenya while in the Netherlands the market is high for irrigated crops.
 - In Kenya there is poor infrastructure in the reclaimed areas, while there is well developed infrastructure in the reclaimed areas of the Netherlands.
 - In Kenya reclaimed land is from swamps and marginal lands while in the Netherlands reclaimed land is from the sea.

Any 3 well stated x = 6mks

ii) Benefit of the Zyder Zee project

- Creation of large fresh water Lake in the middle of the country e.g Lake Yssel.
- Reclaimed polders have attracted town that have improved infrastructures e.g roads.
- The great dyke upon which a road has been built connecting North and South Holland has shortened the coastline distance by about 320 kms.
- The old dykes form protection against tides.
- Reclaimed land has increased available land by about 10% of the total land.
- The degree of sol salinity has been lowered by te fresh water from lake Yssel.
- The fresh water reservoir serves as a catchment basin during winter when the water level on the other side prevent natural drainage.

Any $5 \times 1 = 5mks$.

10. a)i) Types of natural forest

- Equatorial forests.
- Tropical monsoon forests.
- Coniferous forests.
- Deciduous forests.

Any $3 \times 1 = 3mks$

ii) Characteristics of Coniferous forests.

- Forests are cornical in shape to combat snow fall in winter.
- Have needle-shaped leaves, enabling the trees reduce water loss by transpiration in winter.

- The trees are found in uniform stands.
- In most coniferous forest a thick carpet of mosses occurs.
- Evergreen trees mainly of spruce, fir and pine especially in North America, Europe and Siberia. Any $4 \times 1 = 4mks$.

Reasons why hardwood species in Kenya are in danger of extinction. b)

- Increased demand for valuable furniture which they make.
- Encroachment in wildlife protected Ares such as national parks, where such tree are protected.
- Wood fuel demand that is ever rising due to increased population using wood fuel.
- High population increases leading clearing of land for settlement and agriculture.
- Increased use of wood / timber as a source of energy in small scale / Jua kali industries e.g Brick making, Juggery making plants, e.t.c.

Any 3 explained x = 6mks

Two physicgraphic factors that favour the growth of forests in Kenya c)

- Altitude
- Terraine
- Drainage
- Aspect

Any $2 \times 1 = 2mks$

Physical factors that have favoured the development of forestry in Canada. d) i)

- Low temperature experienced discouraging settlement and other forms of land use.
- Ruggedness of the landscape and thin soil, do not favour agriculture.
- High precipitation throughout the year promotes forest growth.
- Valley bottoms along the coast provide good sites for the paper mills and there is clay, which used in smoothing the paper surface.
- Many rivers with waterfalls e.g River Ottawa, provides water used to generate HEP for use in industries such as pulp and paper industries. Any 4 explained x = 8mks.

Problems facing forestry in Canada. ii)

- Large tracts of forest are destroyed by fires and diseases.
- Harsh cold climate slowing down trees growth e.g Conifers Lake 60 yrs to nature.
- Initially felled trees were not replaced.
 - Inaccessibility of some areas due to ruggedness.
- Forest in Northern Canada not accessible in winter due to very cold climatic conditions.

Anv 2 x 1 = 2mks.