

FORM FOUR CLUSTER KCSE MODEL 2

GEOGRAPHY PAPER 2 ANSWER

SECTION A (25 Marks)

Answer all the questions in this section

1.
 - It refers to the extraction of valuable mineral from the earth's crust. (1x1)
 - It involves use of an equipment known as a dredger
 - It involves sweeping and scooping the minerals deposits.
 - The collected mineral deposits are passed over sloping channels, and through evaporation forms heaps of mineral deposits.
 - The deposit are collected for crushing, then packed in bags ready for use/scale. (4x1)
2.
 - Panama canal sea route – Cape of good Hope sea route
 - North pacific sea route –North Atlantic sea route
 - Mediterranean Asiatic sea route
 - Trans–Atlantic sea route (2x1=2)
 - The goods transported are safe and free from damage.
 - They are sealed hence reduces cases of theft of goods during shipment.
 - They are more efficient in utilization of space
 - Containers save time at loading and off loading for its mechanized (3x1)
3.
 - Strong winds damage plant leaf, break the stems or blow away fruits of some crops
 - Strong winds increase evapotranspiration which cause plants to wilt
 - Winds helps in cross pollination in some crops
 - Winds aids spreading some animals and crop diseases. (2x1=2)
 - Human food
 - Livestock feed
 - Used to manufacture cooking oil.
 - Maize cobs and stalks used as domestic fuels
 - Used to manufacture Industrial starch. (any first three x1)
4.
 - Aquaculture (1x1)
 - The region is has cool water/cool temperature which favour abundant planktons

- The region is the most landed hence more mineral released in the oceans that favour plankton growth.

- Convergence of warm/cool water currents creates cool water which favour breeding of fish.

- The region has indented coasts/have numerous sheltered bays which favour breeding of fish/fishing ports. (2x2)

5. -It refers to the difference in value between a country's visible export and imports. (1x2)

- To promote social and economic integration for rapid and sustainable economic growth of member state.
- To foster peace/political stability for member state
- To establish a free trade area/ a common tariffs and customs unions for members state.
- To raised the living standards of the people in the region.
- To co-operate in joint research and adaptation of science and technology for the development. (3x1)

SECTION B (75 Marks)

Answer question 6 and any other two questions in this section

6.

a) (i)

Divided rectangle

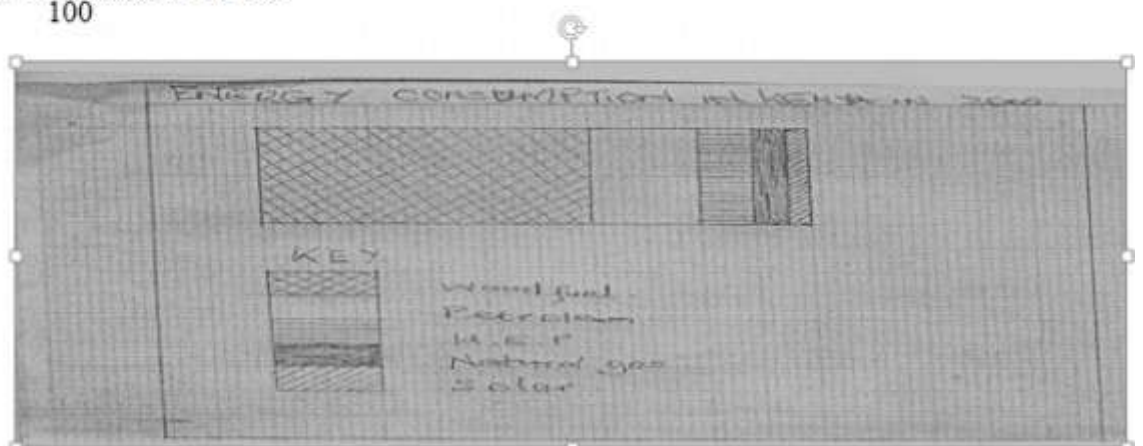
$$\sqrt{\text{wood fuel}} = \frac{60}{100} \times 10\text{cm} = 6\text{cm}$$

$$\sqrt{\text{petroleum}} = \frac{20}{100} \times 10 = 2\text{cm}$$

$$\sqrt{H.E.P} = \frac{10}{100} \times 10\text{cm} = 1\text{cm}$$

$$\sqrt{\text{Natural gas}} = \frac{6}{100} \times 10\text{cm} = 0.6\text{cm}$$

$$\sqrt{\text{Solar}} = \frac{4}{100} \times 10\text{cm} = 0.4\text{cm}$$



Title - 1mk Length (10cm) (1mk)

Key - (1mk)

Calculations each $\frac{1}{2}$ mk (2 $\frac{1}{2}$ mks)

Segments each $\frac{1}{2}$ mk (2 $\frac{1}{2}$ mks)

Total marks (8mks)

- It's difficult to read the exact values of individual components of the whole.
 - Only one unit of measurement can be used.
 - The shape of the rectangle is less appealing. (2x1)
-
- It's easily/readily available.
 - Its relatively cheap
 - It's easy to use.
 - It can be renewed through planting of trees.(2x1)
-
- The cost of production equipment for large scale solar energy is high/expensive .
 - The sophisticated technology to produce equipment of solar energy is insufficient in Kenya.
 - It's difficult to store solar energy in large scale.
 - Solar energy has limited use.

is generated by heating fossils fuels like coal and petroleum while
is generated from earth's internal heat/steam jets in volcanic areas. (2x1)

- H.E.P is clean and environmental friendly while thermal power involves burning of fossils fuels which cause pollution.
 - H.E.P is inexhaustible source of energy while thermal power relay on exhaustible fuel.
 - H.E.P is relatively cheap as it relay on water flow while thermal power is expensive as it relay on heating other forms of energy. (2x1)
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- To find out the type of energy used by people near the school.
 - To identify the sources of energy.
 - To find out different uses of energy near the school.
 - To find problems arising from the use of energy. (2x1)

√ Wood fuel is not the most common solar of type of energy used near the school.

√ Most people do not use wood fuel for cooking

√ Kerosene is not used for cooking and lighting by people in the local environment. (2x1)

✓ Wood/firewood

✓ Charcoal

✓ Kerosene/diesel

✓ Electricity

7.

A forest is a group of trees growing together and covering a large tract of land while Afforestation refer to planting of trees to establish a forest where none existed before. (1x2)

- ♦ Climate
- ♦ Altitude
- ♦ Soils
- ♦ Human activities
- ♦ Aspect (1x3)

✓ Shimba hills forest

✓ Arabuko-sokoke

✓ Kaya forest S Boni/Dodori forest

✓ Mangrove forest (1x2)

- ❖ The mild winters with ice-free waters that make it possible to transport logs throughout year.
- ❖ The many rivers in Canada that provide adequate and cheap hydroelectric power for the forest factories.
- ❖ The many rivers in Canada which provides water needed to convert timber into pulp and paper.
- ❖ A well developed and efficient transport system of road/railway and waterways to transport logs to the factories and finished product to the market.
- ❖ High demand for forest product within Canada and neighboring USA. (3x1)
- ❖ Heterogeneity/mixed tree stands which makes it difficult to exploit.
- ❖ The trees take along gestation period.
- ❖ Heavy hardwoods that are difficult to transport.
- ❖ Large sized and buttressed roots difficult to lumber
- ❖ Low local demand for the expensive hard wood timber.

❖ Hot/wet/humid equatorial climate that is difficult to work in (malarial/muddy) (3x2)

√ The increasing population among communities living adjacent to forest has led to the people to encroach on forest hence reducing forests. √ Incidences of forest fires caused by increased population, which damages the forest especially during dry season.

√ Increased population leads to over exploitation of forest through activities like charcoal burning/logging/building materials. This reduces forests. √ Some forests have been turned into public utilities due to increased population, e.g. agricultural show ground/creation of private land/tea zone which reduces area under forest. (3x2)

8.

√ Tea

√ pineapple

√ Wheat

√ Sisal (2x1)

- Long gestation period/costly maintenance
- Climatic hazards i.e. drought/hail storms
- Monoculture which leads to pest/diseases built up
- Hot-humid conditions of regions favouring estate farming are harsh for manual labour on the estates.
- Managerial problems leading to mismanagement and embezzlement of funds on Estate farms.(4x1)

- High temperature throughout the year /24° c–30° c. S High rainfall throughout the year/1300–1500mm.
- High rainfall that is well distributed throughout the year.
- High relative humidity throughout the year.
- Deep, well drained, loamy/volcanic/clay soil.
- Protection from sunshine/strong winds
- Undulating low lands/low altitude.
- Abundant labour supply. (5x1)

- Ripe coffee berries are harvested by picking.
- The picked coffee berries are taken to collecting centers, where they are sorted, weighed and transported to the factory.
- At the factory the berries are put in pulperies to remove the outer covering/squeeze beans from the pulp.
- The freshly depulped parchment is graded.
- The beans are fermented then washed /clean and dried in the sun.
- The dried beans are winnowed, sorted/graded then packed ready for export /sale/milling.
- The processed beans are sold to KPCU, Which passes them to coffee board of Kenya for marketing.
- Marketing has now been liberalized and large plantations can sell directly to overseas markets.(8x1)

- Employment directly and indirectly hence improved standard of living.
- Coffee is exported to earn foreign exchange used to develop other sectors of the economy/used to import commodities not available locally.
- Coffee farming has led to improvement of roads and railway.
- Processing of coffee has led to development of related industries. (3x2)

9.

- An extensive industrial landscape due to joining together of many industrial towns. (2x1)

- The Ruhr region of Germany
- The pittsburg of USA
- The Tokyo-yokohama of Japan. (2x1)

- To enable them dispose their products while still fresh e.g. foodstuff like bread, dairy products
- To reduce losses through breakages/damages on transit e.g. fragile product like glassware /bottled drinks
- To reduce transport costs e.g. bulky low value products like furniture/tiles/bricks.
- To maximize contact with customers e.g. insurance/printing/ publishing industries. (2x2)

- Cleaning raw materials and machines
- Cooling machines used in the industries
- Used as an ingredient in production
- H.E.P generation for electricity supply (3x1)

- Tokyo-yokohama zone
- Nagoya –industrial zone
- Osaka-kobe zone (2x1)

- Availability of capital to establish and import raw materials like copper from Chile/USA for electronic industries.
- H.E.P tapped from mountainous water falls in supplying electricity for industries/nuclear energy for industrial use.
- Skilled labour from Japanese education system that emphasizes technical skills.
- Long history of industrial development since the reign of Meiji that laid the foundation for electronic industries.
- Ready local and external market for Japanese electronic products.
- Rugged terrain of Japanese discourages agriculture, hence more attention given to industrialization. (3 x2)
- Air, water and noise pollution from the industries thus adversely affecting health of the people.

- Large labour force requirement in industrial towns has led to shortage of houses.
- Production of cheap cars has led to many people owning cars, leading to traffic jams in towns.
- Dumping of wastes from the industries causes land pollution.
- Increased demand for coal, iron and petroleum has led to rise in the cost of manufacturing. (3x2)

10.

- involves keeping cattles for milk and milk product while involves rearing cattle for meat

- Friesian
- Ayrshire
- Guernsey
- Swiss brown
- Alderney
- Sahiwal (3x1)

- Hot and dry climate that makes the region unsuitable for dairy farming that thrives best in cool wet climatic conditions.
- Dry semi-arid and arid conditions hence water and pasture shortages that hinder dairy farming
- Lack of pastures and water during the recurrent droughts in the region which constrains dairy farming.
- Hot climatic conditions/high temperature in the region favours pest and diseases prevalence, thus unsuitable for the delicate exotic dairy cattle.
- Low population density in the region, hence inadequate market for the high perishable dairy farming produce.
- Inadequate transport network that hinders transport hindering dairy farming in the regions.
- Dry/sandy poorly developed soils that sustains scanty pasture that is unsuitable for dairy farming. (3x2)

i) Breeds Similar breeds are reared in both countries e.g. Friesian. (1x2)

ii) Distribution Dairy farming is carried out throughout Denmark while in Kenya mainly restricted to the cool highland areas. (1x2)

iii) Processing – In both countries milk is processed into the similar product e.g. butter, ghee etc.
– In both countries the same processing procedure are used e.g. pasteurization, sterilizing, homogenizing and ultra-heat treatment. (1x2)

d) Measures undertaken by government to improve small-scale dairy farming.

– Improved extension services, thus posting extension officers to every division to update farmers on better dairy farming techniques.

– The government extends credit loans to dairy farmers through cooperatives to help improve dairy farming.

– The government encourage holding of Annual Regional Agricultural shows where farmers attend to learn modern dairy farming techniques. (3x2)

- Will ensure healthy pop which is more productive.
- Reduced incidences of disease especially among the young pop.
- Foreign exchange will be saved that may be used to import food to feed the hungry.