

LAINAKU JOINT PREMOCK

GEOGRAPHY PAPER 2 MARKING SCHEME

1. a) Define horticulture (2mks)

☒ Horticulture is the cultivation of fruits, vegetables and flowers for sale

b) State the features of horticultural farming in the Netherlands
(3mks)

1) The farms are generally small in size. ☒

- **The farmers use advanced/highly specialized scientific techniques/green/glasshouses in crop production**
- **Most of the farmers practice mixed farming.**
- **The farms are intensively cultivated. ☒**
- **Farming is labour intensive. ☒**
- **Farming is carried out within and outside the green/glasshouses.**

2. (a) Differentiate between renewable and non-renewable source of energy. (2mks)

- **Renewable source of energy are sources that are able to be regenerated and used over a long period of time while non-renewable sources are those that get exhausted after a certain period of extraction**

(b) Give three disadvantages of hydroelectric power (HEP) as a source of energy. (3mks)

- **HEP cannot be stored after it has been generated.**
- **HEP is expensive to transmit.**
- **Building of power plant is expensive.**
- **Power supply fluctuates with fluctuating water.**

3 a) State three factors that favor the growth of forest on the Mau Ranges. (3mks)

- **Availability of high rainfall which promotes forest growth.**
- **Presence of cool temperature which is favourable for forest growth.**
- **The steepness of the slopes discourages settlement creating room for forest growth.**
- **The presence of soils rich in nutrients promote forest growth.**
- **Gazettment of the forest by the government ensures growth of trees without interference.**

b) Name two species of indigenous hard wood trees found in Kenyan forests. (2mks)

- **Mahogany**
- **Meru oak.**
- **Mangroves.**
- **Ebony**
- **elgon olive**
- **Elgon teak**
- **Camphor**
- **Mvuli/mvule.**

- **Mangrove.**
- 4. (a) State three physical and human factors favoring coffee growing in Kenya. (3mks)
- **Temperature ranges between 140 -260C/moderate temperature which is suitable for coffee growth.**
- **Rainfall ranges between 1000 – 2030 mm/high rainfall which favours growth of coffee.**
- **The rainfall is well-distributed throughout the year.**
- **The land on which coffee grows ranges between 1500 – 2300 metres above sea level which is favourable for coffee growth.**
- **The land on which coffee grows is gently sloping/undulating preventing flooding.**
- **The soils are deep, well-drained volcanic soils rich in nutrients which are suitable for coffee growth.**
- **There is a large supply of labour force from the local population and which is required for field preparation, planting, weeding, pruning, manuring, picking and processing.**
- **There is a widespread road transport network/road /railway network to transport the labourers/picked berries to the factory/processed coffee to the market.**
- **There is a large number of coffee factories in the coffee-growing areas which ensure coffee is processed immediately after picking.**

(b) List any two role of coffee in the economies of Kenya and Brazil.
(2mks)

- **Both countries export most of their coffee, earning foreign exchange and developing other sectors in the economy.**

- Coffee production in both countries involve many people, creating employment for thousands, thus raising their standard of living from the incomes.
- Coffee production in both countries has contributed to development of transport/construction of roads/railway/ports, opening up the country.
- Coffee in both countries is a beverage, drunk to the pleasure of millions.
- The production of coffee affects other sectors of the economy, for example fertilizer manufacture, promoting industrial development.
- 5.(a) Differentiate between internal trade and regional trade. (2mks)
- Internal trade is the buying and selling of goods and services within a countries borders while regional trade is trade between countries that are found with the same geographical region.

(b) List three major exports from Kenya to the European Union (EU).(3mks)

- Coffee.
- Tea.
- Flourspar.
- Horticultural products-flowers, fruits and vegetables.
- Soda ash.

Pyrethrum

SECTION B

6. The table below shows four agricultural crops produced in Kenya in the years 2000-2002.

CROP AMOUNT IN METRIC TONNES

2000 2001 2002

Wheat

Maize

Coffee

Tea

70,000

200,000

11,000

240,000

130,000

370,000

55,000

295,000

120,000

400,000

40,000

315,000

a) (i) Using a scale of 1 cm to represent 50,000 metric tonnes, draw a comparative bar graph based on

the data above (8mks)

A comparative bar graph to represent four agricultural crops produced in Kenya in the years

2000-2002

(ii) State two advantages of using comparative bar graph (2mks)

- **It is easy to compare different components.**
- **They give clear visual impression of the represented data**
- **They are easy to read/interpret.**
- **They easily show the trend of the given data.**
- **They are easy to draw/construct.**

(iii) Calculate the percentage increase in tea production between the years 2000 – 2002.(2mks)

- **$315,000 - 240,000 = 75,000$. $\frac{75,000}{240,000} \times 100 = 31.25\%$**

0

50

100

150

200

250

300

350

400

Amount in metric tonnes

2000 2001 2002 YEARS

KEY

Wheat

Maize

Coffee

Tea

Marking guidelines:

Title – 2mk

Labelled Y-axis - 1mk

Labelled X-axis - 1mk.

Each correct set of bars – 1mk each.

Key - 1mk

- b) State four reasons why cash crops are mainly grown in Kenyan highlands (4mks)
- **There is high rainfall which is favourable for different crops**
- **The temperature is moderate/cool which is required by various crops.**
- **There deep, well – drained volcanic soils which are rich in nutrients.**
- **There is a widespread road transport system which is required to deliver the produce to the market.**
- **There is a high population which provides the labour required on the estates/farms.**

c) (i) Describe how maize is grown in Kenya from cultivation to harvesting. (7mks)

- **The land is cleared and ploughing done either using hands or tractors.**
- **Harrowing is done to make the soils fine before sowing. Seeds are sown manually by hand or mechanically by planters at the onset of rain.**
- **Two seeds are sown in each hole at a depth of 2.5 – 5 cm in moist soil and 10 cm in dry soils.**
- **Fertilizer is applied during planting.**
- **Gapping and thinning is done to remove /weak seedlings after germination.**

- Nitrogenous fertilizers are added when the crop is 30 – 35 cm high/immediately after weeding for top dressing
- The crop is ready for harvesting in 4 – 12 months depending on the variety and the altitude.
- It is allowed to dry on the stalk and then removed for storage.

(ii) Name the common pests that attack maize in Kenya(2mks

-) Maize stalk-borer. Army warms. Aphids. Birds. Weevils.

7. (a) (i) Identify three characteristics of pelagic fish (3mks)

- They live near the water surface
- They live in large groups/shoals
- They are small in size

(ii) State two reasons why marine fishing is not well developed in Kenya. (3mks)

- Inadequate capital to buy deep sea fishing equipment.
- Small market for marine fish along the coast/sparse population.
- Stiff competition from foreign fishermen.
- Use of small boats discourages deep sea fishing/poor technology.
- The warm waters of the tropics discourage fish breeding.
- The narrow continental shelf. ☐ Shallow water due to the presence of coral reefs.

(b) Why should the government of Kenya encourage fish farming?
(4mks)

- It occupies less space.
- Fish supply proteins.
- To create job opportunities.

- Some fish from the ponds are exported to earn foreign exchange.
- It may lead to the develop fish related industries.
- It is free from international disputes.
- (c) (i) Identify the fishing method shown below. (1mk)

(ii) Describe how the above method is used in Lake Victoria. (4mks)

- Fishing boat with the help of another boat (dory) spreads out the seine net in the lake. ☐ The net is held up in position using floats.
- The net is attached to the boats which surround a shoal of fish.
- After the catch the net is hauled over and the fish is removed by hand.
- (iii) State two problems facing fishing in Japan. (2mks)
- Over fishing depletes some of the fish species.
- Industrial pollution of Japanese waters kills the fish.
- Restrictions imposed on Japanese fleets by her neighbours make it hard for her to maximize her fishing activities.
- (d) Explain four factors that favour fishing in the North-West pacific fishing grounds. (8mks)

☐ Convergence of the cold oya shio and the warm kuro siwo creates favourable conditions for fish since the water temperature is raised making the coasts ice-free for most of the year.

The cold current make the temperature low and this favours the growth of planktons.

- **The broad continental shelf favours the growth of planktons.**
- **The mountainous landscape hinders agriculture making fishing the only alternative source of living**
- **Availability of ready market provided by the densely populated countries like China, Japan and Taiwan.**
- **The advanced technology in the area especially in Japan has encouraged the development of the fishing industry. Japan is a world leading ship builder, electronics and fish farming.**
- **Modern and efficient transportation facilities ensure fish reach the market on good time.**
- **The indented North East Asian coastline with several islands favours the breeding of fish.**

8. (a) Difference between land reclamation and rehabilitation.

(2mks)

☐ Land reclamation is the process by which wasteland is converted into useful land while land rehabilitation is the process of restoring land into its former productive state.

(b) (i) Apart from irrigation state four methods used to reclaim land in Kenya (4mks)

- **Draining of swamps.**
- **Afforestation.**
- **Tsetse fly control.**
- **Filling of quarries.**

☒ Improvement of soil through use of manure.

**(ii) Explain four benefits which Kenya gets from irrigation farming.
(8mks)**

☒ It has raised the standards of living of the people because of sale of crops, bringing them direct income.

☒ It has helped to settle the landless people in some schemes like Mwea.

☒ It has saved the country's foreign exchange because Kenya can rely on domestic rice rather than importing.

☒ It has led to rehabilitation and development of surrounding areas by reclaiming dry lands

. ☒ Social amenities have been put in place, for example, schools, hospitals. ☒ It has led to the improvement of, roads making such regions accessible.

☒ Environmental hazards, for example, flooding have been controlled by the construction of dykes and dams.

☒ It has created employment in the schemes, raising the standards of living of the people. ☒ It has led to the growth of urban centres. ☒ It has led to availability of food. ☒ It has led to availability of raw materials thus contributing to industrial development.

**(c) Give four problems experienced in irrigation farming in Kenya.
(4mks)**

- There has been cases of outbreak of human diseases i.e. malaria, bilharzia which weaken the people.
- There has been cases of mismanagement of irrigation schemes leading to under-production/frustration of the farmers.
- Water shortage occurs, leading to drying up of crops. ☒ Pests and diseases attacking the crops leading to reduced production.
- The siltation of canals reduce water availability to the crops leading to losses
- Labour is at times not enough, leading to losses as crops are not harvested on time. ☒ Occurrence of floods due to heavy rains lead to loss of crops.
- Limited market of the produce due to over-production frustrates the farmers.

(d) (i) what is a polder? (1mk)

☒ **A low lying area which has been reclaimed from the sea enclosed by dykes that protect the land against high water levels**

(ii) Explain three benefits of land reclamation in the Netherland (6mks)

- **More land was created for agricultural and settlement.**
- **Agricultural output increased hence more food and raw materials for industries.**
- **There is improved fresh water supply for domestic or industrial use.**
- **Construction of dykes/concrete walls around the polders has helped control floods, saving lives. a)**

9.(a) Name three major minerals mined in Kenya. (3mks)

☒ Soda ash ☒ Fluorspar ☒ Diatomite ☒ Limestone ☒ Salt.

(b) (i) Describe the open cast method of mining (4mks)

☒ Minerals are prospected and confirmed to exist in an area.

☒ Vegetation, soil and rocks lying above the ore are removed using excavators to reach the mineral deposits. ☒ Excavators are used to dig up the mineral deposits/ore.

☒ The extracted ore is loaded into Lorries using excavators and transported to the processing plant where the minerals are removed.

☒ The minerals are then sold/exported.

(ii) Explain how the following factors influence minerals mining:

• Value of the (2mks)

• ☒ Minerals that are of high value are often mined at a very high cost because of their high demand.

• ☒ Such minerals fetch high prices that cover the cost of production.

• Mode of occurrence (2mks)

• ☒ Minerals that occur at or near the surface can be cheaply mined using open cast method. ☒ Minerals that occur at great depths in the earth's crust are expensive to extract especially by deep shaft method.

• ☒ Some minerals can only be extracted if they are of high value.

☒ Mineral occurrence will determine the cost of mining.

☒ World market prices (2mks)

☒ Fluctuation of world market prices affect the expected incomes by the exporting countries, when the prices are low, mining activities slacken/stop due to low income. ☒ Minerals that fetch high prices in the world market will be mined more than those that fetch low prices.

(c) Explain four ways in which Kenya has benefited from mining trona on L. Magadi. (8mks) ☒

- **The country earns foreign exchange through exportation of trona which is used to import essential items like machinery**
- **The mining of trona has created employment for many Kenyans leading to improvement in their living standards**
- **. It has led to development of industries by providing raw materials thus creating employment opportunities.**
- **Has led to provision of social amenities which have improved the living conditions of the people around Magadi e.g. schools and hospitals.**

- **Mining of trona has stimulated the development of transport lines e.g. the 110 km road to Nairobi and the railway line from Konza to Magadi**
- **It has led to growth of Magadi town, providing services to the people**

☒ The company that runs the mining of trona has improved the living standards of the local people by providing free water for domestic and livestock use.

☐ The government earns revenue through taxation of the earnings from the sale of soda ash.

(d) Give four by-products obtained when crude oil is refined. (4mks)

- Bitumen
- ☐ Wax.
- Sulphur
- Lubricants e.g. grease.
- Petrochemicals.

10. (a)(i) Define tourism. (2mks)

☐ Tourism is the practice of traveling from one place to another for leisure, business or education.

(ii) Two tourist attractions in the Rift valley provinces of Kenya (2mks)

- Rift valley – escarpments, wild animals
- Lakes, mountains, culture (Maasai)
- Historical sites.
- Hyrax hill. ☐ Hot springs.

(b) Explain four factors that hinder domestic tourism (8mks)

☐ inadequate funds to use for travel due to low incomes prevent people from travelling in the country.

☐ Ignorance on the tourist attractions in the country as many Kenyans are not aware of what the country offers, thus not desiring to travel.

- **Poor roads in some tourist areas/national parks especially during rains when they become impassable. ☒**
Insecurity/terrorism in some places hence people fear, especially the coastal region, thus reducing domestic tourism.
- **There has been cases of human-wildlife conflict which make the local people not to appreciate the wildlife, thus hindering tourism.**
- **There has been an increase in encroachment into national parks/game reserves, forcing wildlife to move to remote areas and siting them becomes difficult.**
- **There has been an increase in poaching reducing the number of wildlife, thus affecting domestic tourism.**

(c) Explain three problems experienced by the Kenya Government in its effort to conserve wildlife. (6mks).

- **Ignorance of many Kenyans who destroy wildlife, thus affecting conservation efforts.**
- **There has been an increase in cases of insecurity/terrorism which scares tourist thus reducing the income needed for conservation.**
- **Poaching / illegal hunting of wildlife animals reduces their numbers.**
- **Human activities such as agriculture, mining, road construction has interfered with the wildlife.**
- **Environment pollution causes death of animals such as flamingoes on L. Nakuru.**

(d) Explain four factors that make Switzerland a major tourist centre in the world (8mks)

- The country has magnificent mountain scenery/the Alps which attract mountain climbers and skiers.
- The country is multilingual which attract people from many countries.
- Switzerland has excellent accommodation facilities, hotels, guest houses, taverns chalets, caravan sites which are an attraction to international travelers.
- The country has an excellent transport network – roads, electric trains, cable cars (Aerial lifts) which make it possible to access all tourist sites.
- The country enjoys political stability and neutrality and tourists are assured of safety while there.
- The country hosts many international organizations, thus attracting many delegates.

A comparative bar graph to represent four agricultural crops produced in Kenya in the years

2000-2002