**Term 1- 2023**

**GEOGRAPHY (312/2)**

**PAPER 2**

**FORM FOUR (4)**

**Time: 2 ¾ Hours**

**MARKING SCHEME**

**INSTRUCTIONS TO STUDENTS**

* *This paper has* ***two*** *sections* ***A*** *and* ***B***
* *Answer* ***ALL*** *the questions in section* ***A****. In section* ***B*** *answer questions* ***6*** *and any other* ***TWO*** *questions.*
* *All answers* ***MUST*** *be written in the answer booklet provided.*

**SECTION A**

*Answer* ***all*** *the questions in this section.*

1. (a) Define the term Geography (2 marks)

* ***Geography is the study of earth as a home of man (2mks)***

(b) Give ***three*** reasons why Geography is taught in Kenya. (3 marks)

* ***It’s a career subject***
* ***It enables learners to develop skills and critical thinking***
* ***It provides information about the environment***
* ***It creates awareness and promotion of international understanding***
* ***Teaches about sustainable use of resources***

***(first 3x1=3mks)***

2. (a) What is agroforestry? (2 marks)

* ***Agroforestry is growing of trees together with crops (2mks)***

(ii) Mention three reasons why agroforestry is encouraged in Kenya (3 mark)

* ***To conserve soil***
* ***To provide fodder for animals***
* ***Trees act as windbreaks***
* ***Trees provides fruits for human consumption***
* ***To conserve trees***
* ***Provides raw materials for industries***

***(First 3x1=3mks )***

3. (a) Differentiate between horticulture and market gardening. (2 marks)

* ***Horticulture refers to the intensive cultivation of vegetables, fruits and flowers for sale while market gardening is the intensive cultivation of vegetables and fruits for sale.***

(b) Stateways in which the government is using to control locust invasion in Kenya. (3 marks)

* ***Spraying***
* ***Scaring***
* ***Trapping***

***(ANY 3)***

4. (a) Name ***two*** counties where maize is grown in Kenya (2 marks)

* ***Uasin gishu***
* ***Trans Nzoia***
* ***Kakamega***
* ***Bungoma***
* ***Homabay***

***(first 2x1=2mks)***

(b) State ***three*** conditions necessary for Maize farming. (3 marks)

5. (a) Explain the factors that have led to the increasing demand for fresh fruits and vegetables in Kenya. (5marks)

* ***The growth of towns in Kenya. Market gardening is now widely practiced to meet the demands of urban centers. As urban centers expand the local demand for fresh fruits and vegetables also increases.***
* ***The temperate lands in Western Europe offer good market for Kenyan horticultural products, especially during winter when tropical vegetables, fruits and flowers are in high demand.***
* ***There is increased awareness among the population on the importance of good health, which go hand in hand with good diet.***
* ***Increased population in Kenya as a whole and in the urban centres in particular leads to a higher demand as there are many mouths to be fed.***

**SECTION B**

*Answer question 6 and any other TWO questions from this section.*

6. The table below shows Kenyan exports by destination in Ksh. Million between 2008 – 2010. Use it to answer question (a).

|  |  |  |  |
| --- | --- | --- | --- |
| Region/year | 2008 | 2009 | 2010 |
| Europe | 94,685 | 100,975 | 109,422 |
| America | 22,055 | 18,961 | 24,380 |
| Africa | 116,995 | 162,732 | 188,914 |
| Asia | 57,241 | 59,236 | 81,600 |
| Others | 206 | 3,044 | 5,225 |

(a) (i) In which year were Kenya’s exports highest? (1 mark)

* ***2010***

(ii) Using a radius of 5cm, draw a pie chart to represent the data on Kenya’s exports in 2009. (8 marks)

(iii) State *two* advantages of using pie charts to represent data. (2 marks)

* ***It gives a clear visual impression***
* ***It gives various comparison for the segment***
* ***It shows a range over some period time***

(b) Give reasons why horticultural farming is more developed in the Netherlands than in Kenya.

* ***Advanced technology such as use of green houses***
* ***Developed transport network for easy transportation***
* ***Skilled labour that ensure high quality production***
* ***High demand due to the high population***
* ***Availability of capital***
* ***Accessibility to foreign markets due to central location in Europe***

(c) Mention major cash crops grown in Kenya

* ***Pyrethrum***
* ***Sisal***
* ***Rice***
* ***Wattle***
* ***Sugarcane***
* ***Rice***
* ***Cotton***

7. (a) Name *two* by-products obtained when crude oil is refined. (2 marks)

* ***Grease***
* ***Paraffin***
* ***Tar***

(b) State *three* ways in which mining derelicts can be reclaimed. (3 marks)

* ***Planting trees***
* ***Refiling the spaces***
* ***Planting flowers***
* ***Creation of tourist attraction centre***

(c) (i) Give *two* uses of Gold. (2 marks)

* ***Used to make jewelry***
* ***Used to make ornaments***

(ii) Identify *three* problems facing gold mining in South Africa. (3 marks)

* ***The costs involved in mining gold have increased greatly.***
* ***Due to increasing demand to provide higher wages, married quarters and other social amenities this has led to additional cost in acquiring labour.***
* ***A lot of water is needed for processing gold but the ever increasing population in the Rand also needs water, yet this area receives seasonal rainfall.***
* ***The Rand mines are becoming deeper. This has led to pressure bursts underground and ground shatters as the ore is removed. This is due to the great pressure from the heavy weight of the rocks above.***
* ***The gold grade being worked now is of poorer quality than that of some years back.***
* ***Exhaustion of the minerals because gold is a non – renewable resources***

(iii) Describe the processing gold. (5 marks)

* ***After the preliminary concentration of the ground pulp, as much as 94% of the gold is removed by solution in cyanide.***
* ***The content is called potassium gold cyanide. The solution is not pure gold because it contains amount of uranium.***
* ***The solution is then mixed with zinc dust causing the solution to precipitate out leaving uranium.***
* ***This is fed into the Sulphuric acid tanks which dissolves the uranium.***
* ***Gold is melted out and formed into bars at Gemstones town on the rand.***

(d) (i) Name *two* alluvial mining methods. (2 marks)

* ***Panning***
* ***Dredging***
* ***Hydraulic mining***

(ii) Explain *FOUR* ways in which soda ash mining contributes to the economy of Kenya. (8 marks)

* I***t is exported to earn 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 eg the glass manufacture.***
* ***It has led to development of social amenities in the area***
* ***It has led to the growth to Magadi town***
* ***Led to the growth of both local and foreign tourism***

8. Study the photograph shown and answer the questions that follow



1. (i) What type of a photograph is this ? Give justification for your answer. (3 marks)

* ***Ground general view***
* ***Reason –it focuses on many items***

(ii) Which type of a forest is this ? (1 mark)

* ***Natural forest***

(b)Draw a rectangle measuring 12 cm by 10cm to represent the photograph .On the rectangle mark and label three main features . (5marks)

A SKETCH OF THE PHOTOGRAPH

***Title= 1mk***

***Rectangle = 1 mk***

***Features =1mk each 3mks Total 5mks***

(c ) Explain six reasons why Kenya should conserve her forests. (12 marks)

* ***Forests helps to regulate the amount of CO2 in the atmosphere***
* ***Forests helps in soil and water conservation and preservation***
* ***Forests regulates the climate of the areas they occupy and neighbouring areas by creating micro-climate in such areas***
* ***Forests provides aesthetic appeal to the environment***
* ***To protect the endangered animals/ Plant species /To preserve genetic resources***
* ***To promote tourism/ tourist***
* ***To generate foreign exchange/ revenue through sale of forest products***
* ***To keep them for posterity/ future generations/ To preserve cultural heritage***
* ***For education/ research purposes***
* ***To ensure continuous supply of wood fuel/timber/herbal/medicine/raw material for paper making.***
* ***To protect the water catchment areas/create microclimates/maintain hydrological cycle.***
* ***To create employment opportunities eg forest guards***
* ***To reduce importation of forest products/save foreign exchange.***
* ***To maintain source of food supply/ maintain soil fertility***
* ***For preventing desertification***
* ***To sustain sources of raw materials for industries***

***Any 6 explained x2 =12mks***

(d) Give the differences between forestry in Kenya and Canada under the following sub-headings.

(i) Tree harvesting (2marks)

* ***In Canada, felling is done in winter while in Kenya felling takes place throughout the year.***
* ***In Canada, harvesting is done through clear cutting while in Kenya it is selective logging.***

***Any 1 x2 =2mks***

(ii) Transportation of logs. (2marks)

* ***-In Canada, logs are transported using melt water, rivers while in Kenya transportation is by road.***

***Any 1x2 =2mks***

9. (a) Name *two* counties in Kenya where wheat is grown in large scale.(2 marks)

* ***Uasin Gishu***
* ***Nakuru***
* ***Narok***
* ***Laikipia***
* ***Transzoia***

1. State *five* physical conditions that favour wheat growing in the Kenya.

(5 marks)

* ***Warm temperatures***
* ***Moderate rainfall***
* ***Gently sloping land that allows mechanization***
* ***Deep volcanic soils for high production***
* ***High altitude which reduces incidences of high humidity***

(c) (i) Describe coffee growing in Kenya from planting to harvesting. (6 marks)

* ***Coffee seeds are sown in a nursery for 1 year.***
* ***Holes are in the field and filled with manure.***
* ***Seedlings are planted in the holes.***
* ***Weeding is done regularly to reduce competition for water and nutrients.***
* ***Plants are pruned regularly to control cropping and facilitate picking.***
* ***Fertilizers are applied on older plants to maintain soil fertility.***
* ***Between 2 and 4 years, coffee starts to bear berries.***
* ***Berries are harvested by hand.***

(ii) State *four* problems facing coffee farming in Kenya. (4 marks)

* ***Poor payment which causes farmers to neglect or uproot the crop and venture in other areas such as horticulture and dairying.***
* ***Diseases e.g. C.B.D and leaf rust which reduce the coffee yields.***
* ***Pests e.g. leaf miner which attacks coffee leaves causing them to fall off.***
* ***Mismanagement of some co-operatives and embezzlement of funds by leader which has caused some co-operatives to close up.***
* ***Exhaustion of soil as coffee uses a lot of nutrients from the soil.***
* ***Inadequate capital making the farmer unable to buy inputs such as fertilizers and chemicals leading to low production.***
* ***Unreliable rainfall and drought conditions which causes young berries to ripen prematurely and fall off.***
* ***Competition from other crops which have caused farmers to abandon coffee due to low prices.***

(d) Explain *four* measures taken by the government of Kenya to improve beef cattle farming. (8 marks)

* ***Helping farmers to creates cooperatives to market their products***
* ***Animals are fed on natural grass in pastoralism and nutritious drought resistant pasture introduced in some ranches to improve beef quality.***
* ***Fertilizers are being applied on the pasture to improve its quality.***
* ***Cattle are frequently inoculated against fatal diseases like anthrax.***
* ***Cattle dips and veterinary services are provided by the government to improve farming activity.***

10. (a)(i) What is nomadic pastoralism?

***Nomadic pastoralism involves constant or seasonal movement/migration of nomads and their livestock (cattle, goats, sheep, donkeys and camels) from one place to another in search of green pastures and water.***

(ii) Name two nomadic communities in Africa.

* ***Maasai***
* ***Fulani***
* ***Nubia***
* ***Hottentots***
* ***Tuareg***

1. State five characteristics of nomadic herding.
   * ***Seasonal movement of nomads and their livestock***
   * ***Cattle are kept as a sign of wealth***
   * ***Large herds of cattle with uncontrolled breeding are kept***
   * ***There are high incidences of diseases***
   * ***Poor marketing of the animals and their products***
   * ***Many kinds of animal (cows, goats sheep, donkeys etc.) are grazed together***
   * ***Little or no crop is grown as much attention is turned to animals***
   * ***Lack of organized land tenure where land is communally owned***

( c ) Give four problems facing nomadic pastoralism.

* ***Extensive droughts cause water shortages and lack of pasture leading to deaths of livestock***
* ***Wild animals may attack the nomads and their livestock***
* ***Lack of proper shelters expose the pastoralists to the hazards of bad weather such rainstorms***
* ***Floods may destroy pastures for the nomads***
* ***Cattle rustling leads to loss of livestock and endanger the lives of the nomads***
* ***Overstocking leading to overgrazing and consequent land degradation and soil erosion***
* ***Pests and diseases affect the health of animals lowering their productivity or causing death***

( d ) Highlight three undertakings by the government of Kenya aimed at improving the livestock industry.

* ***Introduction of exotic breeds/cross breeding with indigenous breeds. This ensures high quality production and hardiness***
* ***Provision of extension officers who offer or are supposed to offer necessary pieces of advice to the farmers***
* ***Dams and water reservoirs have been built to ensure steady supply of water required for animal production***
* ***Funding research in animal disease control and management***
* ***Government have at times subsidized fertilizer prices used to improve pasture***
* ***Farmers are encouraged and taught to adopt modern methods of rearing and breeding beef cattle***
* ***The government has decentralized prices of meat to enable farmers maximize profits***
* ***The creation of the now defunct Kenya meat commission***

1. Discuss how cattle ranching contribute to the economy of Kenya.

* ***Earns foreign exchange when livestock products e.g. hides, skins, milk etc. are exported***
* ***Promotes the development of industries such as Kenya co-operative creameries (KCC), leather industries (e.g. Bata Shoe Company etc***
* ***Creation of employment opportunities in the ranches, industries and other related sectors***
* ***Promote improvement of transport and communication network***
* ***Supply high quality stock for beef/food, thus contributes to the improvement of health***
* ***Contributes to increased standard of living***

(f) State at least three features of ranching.

* ***Little or no migration.***
* ***Ranches are scientifically managed.***
* ***Continuous cover of green pastures of either native or re-sown selected grasses e.g. alfalfa, lucerne and clovers.***
* ***The animals are raised for sale.***
* ***Commercial grazing supports the development of towns and communication systems.***

g) Give at least two problems facing pastoral communities in Kenya today.

* + ***Limited grazing land.***
  + ***Animal diseases and pests***
  + ***Multiplicity of political boundaries.***
  + ***Epidemics***
  + ***Lack of better management skills.***
  + ***Poor marketability***
  + ***Harsh climatic conditions.***