Term 1 - 2023

GEOGRAPHY

MARKING SCHEME

FORM FOUR

PAPER 2

**SECTION A**

1. **a. Tourist attractions into Rift Valley of Kenya**
* Wild animals
* Lakes
* Varied relief features
* Hot springs and geysers
* People’s culture
* Mining sites
* Pre historical and historical sites like Olorgesailie and Kapenguria prison. *(Any 3x1 = 3 marks)*

 **b. Measures taken by the government of Kenya to attract more tourists**

* Improving roads to tourists
* Building more hotels
* Improving air links with other courtiers
* Preservation of wildlife, eradicating poaching and maintenance of tourist sites
* Improved security in the parks
* Traditional culture is being promoted
* Providing package tours for the tourists to make it cheaper.
* Covering the rates charged during low season to attract domestic tourists *(Any 2 x 1 = 2 mks)*

**2. Define Agroforestry**

 It is a land use system where there is growing of trees and crops on the same piece of land at the same time *(1x2=2mks)*

 **b) Reasons why Agroforestry is encouraged in Kenya**

 - to ensure continuous supply of wood fuel, timber herbal medicine and raw materials for paper making

 - reduce importation of forest products

 - create employment opportunities

 - protect the soil from erosion

 - improve the scenic beauty

 - to maintain the hydrological cycle (*Any* ***3 x 1 = 3mks)***

**3. a) Characteristics of market gardening**

 - the farms are very small in size

 - they are located near urban / market centres

 - the farms are located near good communication links with consumers

 - land is intensively farmed

 - the work is labour intensive / most work is done by hand

 *(Any 2 x 1 = 2mks)*

 **b) Reasons why horticulture is more developed in Netherlands than in Kenya**

 - high demand for horticultural products in Netherlands than in Kenya

 - farmers in Netherlands have more access to capital needed for horticultural farming than in Kenya

 - Netherlands has well organised market procedures through cooperatives unlike in Kenya

 - there is more advanced horticultural farming research in Netherlands than in Kenya

 - Netherlands unlike Kenya has highly skilled labour for production and handling of horticultural products

 - Netherlands has more advanced technology which enhances horticultural farming than in Kenya

 *(Any 2 x 1 = 2mks)*

**c) Advantages of growing horticultural crops in green houses**

 - plants are safe from climatic hazards like hailstones

 - the spread of crop pest and diseases are easily controlled

 - moisture requirements are effectively controlled

 - weeds are easily controlled since the area is relatively small

 - the crops are grown throughout the year. (A*ny 2 x 1 = 2mks)*

**4. a) What is energy crisis?**

 Its a situation in the economy when the demand for crude outstripped the supply. *(1x2=2mks)*

 **b) Effects of energy crisis**

 - closing down of industries

 - unemployment

 - industries operating below capacity

 - inflation / rise in price

 - negative effect on agricultural production *(Any 3 x 1 = 3mks)*

**5. Reasons why some industries are located near the source of raw materials**

 - the raw materials may be too bulky and thus expensive to transport

 - some raw materials are perishable so they have to be processed before transportation

 - processing reduces transport costs *(Any 2 x 1 = 2mks)*

**b) Reasons why the new county government system should encourage the Jua Kali industry in their regions**

 - it will be a major source of employment especially in rural areas

 - to provide quality products at affordable prices to the locals

 - help reduce / eliminate rural urban migration *(Any 2 x 1 = 2mks)*

**SECTION B**

1. i) using a scale of 1cm represent 50,000 metric tonnes, draw a comparative bar graph to represent the data above. (8mks)

 

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

* it gives a good visual impression
* values in the same group can be compared easily
* the individual contribution made by the variables in each group can be easily identified.

 *(Any 2x1=2mks)*

1. **i) Name two counties in Kenya where wheat is grown in large scale. (2mks)**
* Nakuru
* Narok
* Uasin Gishu
* Nyandarua

 *(Any 2x1=2mks)*

 **ii) State three conditions that favour wheat farming in Kenya. (3mks)**

* Sloping land for ease of mechanization
* High altitude (1500 – 2000m) above sea level
* Moderate rainfall (500mm – 1270mm)
* Warm temperatures (150c – 200c) for at least three months.
* Deep fertile volcanic soils
* Warm dry sunny spell to enhance ripening and harvesting.

 *(Any 3 x1=3mks)*

1. **state four benefits of wheat growing in Kenya. (4mks)**
* Source of income for those involved in the activity
* Source of food to the Kenyan people
* Through wheat farming many are employed either directly or indirectly
* Saves foreign exchange if it was to be imported.
* Promotes industrialization in Kenya
* Improvement of infrastructure eg roads *(Any 4x1=4mks)*
1. **explain three factors that make Canada produce more wheat than Kenya.**
* Canada has extensive tracts of land which has enabled large scale mechanization of wheat
* Canada is a developed country therefore has more capital enabling farmers to sustain production unlike Kenya which has inadequate capital.
* Advanced scientific research in Canada enables the production of higher yielding seeds, better farming tools, seeds, pest control, disease control etc.
* Wheat farmers in Canada specialize in wheat unlike Kenya where farmers practice mixed farming.
* There is higher demand for wheat in Canada than in Kenya
* Farmers in Canada have had a long experience in wheat production spanning over centuries unlike Kenya where wheat farming is relatively new/introduced by white settlers

 *(Any 3x2= 6 marks)*

**7. (a)(i) Types of minerals**

 -Metallic -Non-metallic -Energy minerals *(Any 3 x 1 = 3mks)*

**(ii) Occurrence of minerals**

 -Veins and lodes -Beds and seams

 -Alluvial deposits -Weathering products *(Any 3 x 1 = 3mks)*

**(b) (i) Shaft mining method**

 -A vertical shaft is sunk /dug.

 -Horizontal tunnels are dug

 -Props are used to support the roof of the horizontal tunnel.

 -Light railway line/conveyer belt is laid along the floor of the horizontal tunnel.

 -Mineral ores are blasted.

 -Cages/cranes are used to transport the ores to the earth’s surface.

 *NB: Sequence must be followed to score (5x1=5mks)*

**(ii) Challenges faced by shaft miners**

 -Sometimes mines get flooded with subterranean water.

 -There are occasional emissions of poisonous gases in the mines.

 -The dust produced causes respiratory diseases.

 -Sometimes tunnels collapse causing death of miners. *(Any 3 x 1 = 3mks)*

**(c) Problems facing the mining industry in Kenya**

 -Some minerals are found in remote/inaccessible areas which make them difficult/exploitation.

 -Pollution of the areas by noise/blasts/smoke/waterproofs is all health hazards.

 -The country faces shortage/inadequate capital for exploitation.

 -Shortage of skilled personnel hence country relies on expatriates who remit their salaries and dividends to their foreign countries.

 -Land use conflict e.g. Titanium mining in Kwale between Tiomin Company and the local people delays/hinders mining. *(Any 4x 2 = 8mks)*

**(d) Reclamation of mining derelicts**

 -Planting trees -Creating a park to attract tourists

 -Introducing for settlement/farming -Refilling the holes. *(Any 3 x 1 = 3mks)*

**8.(a) Four major fishing grounds in the Atlantic and Pacific oceans. (4mks)**

**-**The North-west Atlantic fishing

-The North -East Atlantic fishing ground

-The North – West pacific fishing ground

-The North – East pacific fishing ground *(4x1=4mks)*

**(b) Five main factors favouring these fishing grounds. (5mks)**

-Availability of plenty of planktons

-Indented coastlines and shallow extensive continental shelves.

-The cool climate resulting in cool ocean waters.

-Availability of capital and advanced technology among the border countries.

-A fishing eating culture exists among the population of the regions.

-A high population which offers a ready market and labour.

-Convergence of cold and warm ocean currents in the areas. *(Any 5x1=5mks)*

**(c) Three types of fishing and for each one, state one method of fishing used. (6mks)**

-Pelagic fishing which mainly uses drifting and seining

-Demersal fishing which mainly uses trawling and longlining.

-Inshore fishing which mainly uses hook and line, gill nets, casting nets, pound nets, trap nets, haul seining and purse seining.

-Fresh water fishing which uses seining, gill nets, fishing lines and traps.

(*Any 3 types, with corresponding correct method =3x2=6mks*)

**(d) (i) Four reasons why the marine fishing industry in East Africa is not well developed. (4mks)**

**-**The warm tropical waters do not favour large scale breeding of fish species.

-The narrow continental shelf limits widespread growth of planktons for fish.

-There is a limited market at the coast due to low purchasing power.

-Inadequacy of capital and poor technology hamper the development of the industry.

-There is stiff competition from industrialized nations which have better equipment.

*(Any 4x1=4mks)*

**(ii) Six ways in which the fishing industry is of significance in Kenya. (6mks)**

-It helps in the diversification of the economy

-Fishing is a source of food

-The industry creates employment opportunities

-Fishing is a source of foreign exchange when sold abroad.

-It has led to the development of subsidiary industries.

-It has led to development of infrastructure in some areas.

-It is a source of raw materials for other industries

-It promotes scientific research, especially in fish farming

-Fish control mosquito larvae, especially in swamps.

*(Any 6x1=6mks)*

9. (a) **Apart from Mwea, name five large irrigation schemes in Kenya.**

* Ahero Perkera
* West Kamu
* Daua
* Galole / Hola / Bura
* Mitunguu
* Katila
* Taveta
* Kibwezi
* Bunyala *(Any 5x1=5)*

(b) **Explain four conditions that made Mwea a suitable location for irrigation scheme.**

* The area was sparsely populated thus making it easy and cheap to resettle the people.
* Presence of river Thiba, Nyamindi which would provide water for irrigation.
* The black cotton soil in the area which was suitable for irrigation because they retain water.
* The fertile soil in the area which was suitable for crop production.
* Extensive land for future expansion.
* The gentle land would allow water to reach the farm through gravity.
* The unreliable /inadequate rainfall received in the area made it necessary for irrigation to be practiced. *(Any 4x2=8mks)*

(c) **Explain three benefits to farmers in the Pekerra irrigation scheme.**

* The people who live in the area were originally nomads but now they lead settled lives.
* Initially the people in the area had no regular sources of income, but nowadays, this is earned from sale of maize and other crops.
* The establishment of the scheme led to provision of social amenities.
* Infrastructure which have improved people standard of living.
* Tenants are able to grow food crops. This has improved their sufficiency it food/has improved their diet.
* The establishment of the scheme has created employment opportunities for the people in the area. *(Any 3x2=6mks)*

**(d) Explain three problems experienced by farmers in the Pekerra irrigation Scheme.**

* The stagnant water in the scheme encourages breeding of snails and mosquitoes which spread diseases.
* Silting of canals/weeds growing in the canals reduce the flow of water into the fields. The farmers spend extra time and money dredging the canal.
* Delayed low payment discourages the farmers.
* Fluctuation of pawpaw, onions prices in the market.
* Competition discourages / demoralize the farmers.
* Diseases and pests that attack the crops leading to low yields.
* Weeds compete with crops for nutrients lowering crop yields.
* Salination lowers quality of soils hence lower yields.
* Shortage of labour leading to use of hired labour which is very expensive.

*(Any 3x2=6mks)*

10. (a) **Breeds of dairy cattle reared in Kenya.**

* Guernsey
* Arsyshire
* Alderney -
* Sahiwal
* Jersey
* Frisian
* Zebu
* Swiss Brown *(Any 2x1=2mks)*

(b) **Factors that favour dairy farming in Denmark**

* Availability of capital to run the farms.
* There is specialisation and advanced technologists.
* a well-developed co-operative movement.
* Availability of market for dairy produce at home and abroad.
* Plenty of pasture. A high nutritious fodder.
* A well-developed transport system
* Mechanised system of farming.
* Consolidation of the small farm units. *(Any 4 x 1 = 4mks)*

(c) **Problems faced by dairy farmers in Kenya.**

* Inadequate and poor pasture.
* Stiff competition from other farming practices.
* Poor transport network in some places especially during rainy seasons.
* Inadequate extension services.

- Constant droughts leading to inadequate water.

* Poor marketing systems.
* Inadequate capital to by expensive farm inputs.

- Importation of dairy products by unscrupulous traders. *(Any 5 x 1 = 5mks)*

(d) **Factors that favour beef farming in Argentina**

- Ideal climate of moderate rainfall about 1000mm well distributed throughout the year.

- Presence of natural open grasslands – pampas

- Well organized and managed ranches.

- Ready market locally and abroad.

- Introduction of European cattle like Hereford which are good quality cattle.

- Availability of capital.

- Fertile loess which favours growth of good pasture.

- Good transport network.

- Undulating landscape that favours grazing.

- Scientific management of the cattle ranches.

- Invention of animal drugs which have almost eradicated pest and diseases.

 *(Any 6 x 1 = 6mks)*

(e) **Ways in which the government of Kenya could assist nomadic pastoralists to improve the quality of their livestock**

* Provision of veterinary services
* Government could improve on pasture by encouraging the planting of nutritious drought resistant grass.
* Construction of boreholes in dry areas to solve water problems.
* Encouraging reduction on the number of cattle to improve on quality.
* Construction of cattle dips.
* Encouraging paddocking and zero grazing.
* Encouraging pastoralists to form co-operatives which can avail loans and required cattle farming inputs to famers. *(Any 4 x 2 = 8Marks)*