**3KNT ALLIANCE JOINT EXAMINATIONS – 2017 FORM FOUR**

**GEOGRAPHY PP 2 MARKING SCHEME**

 **SECTION A (25MKS)**

1.a) Minerals mined at

 W – Flourspar

 Y – Diamond

 Z – Copper

b) Formations in which mineral ores occur.

- Some minerals occur as evaporates

- Other occur as veins and lodes

- Some mineral occur as alluvial depostis/places deposits

- Some mineral are found in seams/beds.

2.a) Types of dairy cattle kept in Kenya.

- Friesian

- Aryshire

- Jersey

- Guensey 3 x 1 = 3mks

b)i) Physical conditions that favour dairy farming in Kenya.

- High rainfall of over 1000mm that is experienced in Kenya highlands.

- Well drained deep soils which enables growth of quality grass.

- Ready market available due to high population in the highlands and nearby towns.

- Good transport network in dairy farming areas to enable quick milk transportation to market and processing plants.

- Warm temperature/cool temperature averaging above 180C. 4 x 1 = 4mks

ii) Problems facing dairy farmers in Kenya.

- Insufficient feeds especially during dry season because our dairy farming is rainy fed.

- Mismanagement of dairy co-operatives that have led to delay of payment to farmers.

- Expensive farm inputs lowering farmers profit margins.

- Impassable roads during rainy season which hinders delivery of milk to the factories.

- Shortage of proper storage facilities at collection centres resulting to milk going bad before getting to the factories. 3 x 2 = 6mks

c)i) Measures the government is taking to improve dairy farming in Kenya.

- Encouraging farmers on use of artificial insemination in order to improve quality of breeds kept.

- Encouraging farmers to grow fodder crops than depending on natural pasture.

- Revamping New KCC as a market and improving milk prices as motivation.

- Training farmers though seminars and workshops on scientific methods of doing farming such as zero grazing.

- constructing new roads and improving existing ones to facilitate transport of milk to the market.

 3 x 1 = 3mks

ii) Comparison of dairy farming in Kenya and Denmark.

- In Kenya, dairy farming is carried out mainly in the highlands while in Denmark, it is carried out throughout the country.

- In Kenya, farmers practice mixed farming while in Denmark farmers are specialized.

- In Kenya, most dairy co-operatives have suffered mismanagement and do not have enough funds to assist the farmers while in Denmark, dairy co-operatives are highly managed and developed to provide services to farmers. 2 x 2 = 4mks

d)i) Methods most likely to have been used to collect information.

- Observing

- Interviewing

- Use of questionnaire

- Sampling 3 x 1 = 3mks

ii) Follow-up activities after the field study.

- Discussing the findings

- Writing reports

- Displaying samples

- Group reports

- Drawing maps, tables, graphs and charts. 2 x 1 = 2mks

3.a) Examples of primary sources of population data.

- Population census

- Register of births and deaths

- Sample survey that are undertaken nationally. 2 x 1 = 2mks

b) Reasons for carrying out population census.

- To know the size of population

- Helps government to plan for her people.

- Helps on locating administrative boundaries.

- Helps government to distribute its resources equitably

- Helps government to create employment opportunity to people

- Helps government to know growth rate of it population. 3 x 1 = 3mks

4.a) Types of energy sources.

- Renewable

- Non-renewable 2 xx 1 = 2mks

b) Causes of energy crisis.

- Over exploitation of available resources.

- Control of oil resources by few oil producing countries.

- Over-consumption due to improved technology which uses a lot of energy.

- Sharp rise in prices leading to high demand hence shortage.

- Political instability making oil producing countries to withhold oil, leading to energy crisis.

 3 x 1 = 3mks

5.a) Methods used to control tsetse flies in Kenya.

- Trapping

- Use of pesticides

- Clearing bushes

- Sterilizing males

- Creating of buffer zones. 2 x 1 = 2mks

b) Negative effects of uncollected garbage on the environment.

- Garbage heaps are unattractive/ugly.

- Garbage produce foul smell.

- Garbage washed into water surface causes pollution.
- Organisms that thrive in garbage may transmit diseases.

- Some waste may cause injury

- Block drainage systems.

- May cause obstruction on roads/pavements

- Some toxins from the garbage pollute the soil. 3 x 1 = 3mks

6.a)ii) State 2 advantages of using comparative bar graphs.

- They allow ease in comparison.

- They give a clear visual impression.

- They are easy to read.

- They easily show the trend of the given data

- Easy to construct.

b) Calculate the percentage increase n wheat production between the year 2000 and 2001.

 130,000

 - 70,000

 60,000

 60,000 x 100

 70,000

 = 85.71%

c) State 5 physical conditions required for the growing of tea in Kenya.

- Cool/warm climate (100C to 280C) throughout the year.

- High rainfall (1000 – 2000mm) well distributed throughout the year

- Areas that are frost-free.

- Deep light and well drained soils.

- Gentle sloping/undulating land.

- Acidic/volcanic soils (pH of 4 – 6)

- High altitude (1000 – 2300m) above sea level.

d)

- Delayed/low payments that lowers the morale of the farmers.

- Mismanagement/embezzlement of funds thus farmers are discouraged.

- Poor feeder roads in the tea growing areas lead to delay in collection and delivery of the green leaves hence wastage.

- Adverse weather conditions such as long droughts/hail storms leads to destruction of the crop hence low yields.

- Fluctuation of prices in the world market makes it difficult for the farmers to plan ahead/lowers their morale/discourages farmers.

- High production costs due to high prices of farm inputs lead to lower yields since most farmer cannot afford them.

- Pest and diseases destroy corps lowering the yields e.g. red spindermites, nematodes.

7.a)i) Forestry is the science of planting, caring and using trees and their resources. 1 x 2 = 2mks

ii) Factors favoring growth of forests on Mt. Kenya.

- The areas receives high rainfall (1000 – 2200mm) throughout the year which encourages growth of trees.

- The area has deep fertile volcanic soils that allow roots penetrate deep into the ground to support the trees.

- The area has moderate cool climate ideal for growth of a variety of trees.

- The area is gazette forest reserve and cultivation is prohibited allowing forest to grow without interference.

- The steep slopes discourage human activities thus enabling forests to thrive well. 3 x 1 = 3mks

iii) Factors that have led to reduction of area under forest on slopes of Mt. Kenya

- Illegal encroachment of human activities.

- The illegal cultivation has led to clearing of forest.

- Prolonged droughts have caused drying of some forests.

- Pest and diseases destroy some trees in the forest.

- Outbreak of forest fire/ charcoal burning destroy trees in the forest. 3 x 1 = 3mks

b) Measures taken by Kenya government to conserve forests in the country.

- Government gazetting forested areas to reduce encroachment by people to the forests.

- Creating public awareness through mass media/public barazas on importance of conserving forest resources.

- The government enacting laws to prohibit cutting down of trees without a license.

- Government has set aside national tree planting day to encourage people to plant more trees.

- The government is employing forest guards to protect forest from fires/other illegal human activities.

- Encouraging recycling of papers and use of other sources of energy to reduce demand on trees.

- Carrying out research through KEFRI and ICRAD in order to come up with ways of controlling pest and diseases and developing species suitable for different ecological regions. 4 x 2 = 8mks

c) Difference in exploitation of softwood forests in Kenya and Canada

i) Period of harvesting; harvesting is done throughout the year in Kenya while in Canada harvesting is n winter and early spring. 2 x 1 = 2mks

ii) Transportation; in Kenya, transportation is mainly by road while in Canada transportation is mainly by water. 2 x 1 = 2mks

8.a)i) Two fresh water fisheries in Kenya.

- Lake Victoria

- Lake Naivasha

- Lake Baringo

- Lake Chala

- Lake Turkana 1 x 2 = 2mks

ii) Three methods used to preserve fish

- Freezing

- Salting

- Canning

- Sun drying

- Smoking 1 x 3 = 3mks

iii) Problem experienced by fishermen in Lake Victoria

- The occurrence of strong wind lead to high waves causing accidental drowning/destruction of fishing vessels and nets.

- Most fishermen have poor fishing equipment/motorboat engines while are inefficient. This leads to a low catch.

- Fishermen lack appropriate storage/preservation facilities lead to low catch.

- Presence of floating vegetation/water hyacinth entangles and tear the fishing nets which is a loss to the fishermen/hinders movement of fishing boats.\

- Parts of the lake shores are swampy/marshy which makes the landing of catch difficult.

- Insecurity/theft of fish and fishing equipment discourages the fishermen.

- Some of the fish species have depleted due to overfishing. 2 x 3 = 6mks

b)i) Factors that favour fishing in the North West Pacific fishing ground.

- Convergence of Cold Oya Shiwo current and warm Kuroshiwo bring cool waters ideal for fishing.

- Broad continental shelf favour growth of planktons.

- Indented coastline with several islands and sheltered inlets favour fish breeding.

- Mountainous landscape that makes fishing the alternative economic activity.

- Availability of labour. It is provided by the dense population in the Asian countries.

- There is ready market for fish and fish products. This is due to the dense population in the Asian countries.

- There is advanced technology in the region.

- There is modern and well-developed transport network. This facilitates quick movement of fish from fishing grounds to the fishing centres.

- Adequate capital to buy the needed fishing equipment. 2 x 4 = 8mks

ii) Ways the government of Kenya is promoting the fishing industry in the country.

- Fishermen are given loads to expand their fish farming.

- Fishermen are encouraged to form co-operatives.

- Research is carried out on fish diseases and fishing feeding habits.

- Over-fished areas are re-stocked with fingerlings.

- There is standardization of the size of nets used in fishing.

- There is restriction of fishing from some specific parts of the sea where fish breed.

- Laws have been enacted against water pollution to protect fish.

- Clearing of water hyacinth from the fresh water fisheries. 1 x 6 = 6mks

9.a)i) Light industries manufacture or process products which are not bulky or heavy while heavy industries manufacture heavy and bulky products using raw materials like iron and steel. 2mks

ii) Non-food manufacturing industries in Kenya.

- Foot wear industry

- Soap manufacturing

- Tobacco processing

- Sisal processing

- Bees wax processing

- Saw milling

- Pulp and paper industry.

b)i) Reasons why Kenya should be industrialized.

- To create more jobs hence reduce unemployment.

- To be self sufficient in manufactured goods hence reduce importation.

- To be able to export many manufactured goods hence reduce importation and increase foreign exchange.

- To diversify the economy.

- To foster good international relations with the trading partner.

ii) Ways in which Kenya government encourage Jua kali

- The government provides space for the establishment of Jua kali sheds.

- The government promote co-operatives though which artisans get loans and market.

- It sources fund from donors and NGOs to enable traders to expand, market their products.

- It offers training through seminars and workshops to improve skills of the artisans.

- It offers advisory services to the artisans on marketing

iii) Problems associated with industrialization.

- Imbalanced in the economic development.

- Inflation of level value around industrial zones e.g. Athi river.

- Degradation of the environment and water pollution.

- Displacement of people to set up industries.

- Increase in crime in urban areas.

- Erosion of social values and norms.

- Slums development and spread.

- Depletion of natural resources to satisfy demands.

c)i) Manufacturing zones in Japan.

- Tokyo – Yokohama industrial zones

- Osaka- Kobe industrial zone

- Nagayo industrial zones.

ii) Types of industries in Ruhr region.

- Textile industries

- Petrol – chemical industry

- Cutlery industries

- Electrical industries

- Metallurgical industries

- Water and paper industries

d) Factors leading to growth of iron and steel industries in Germany.

- Availability of coal, iron ore and limestone as raw materials.

- Availability of water from R. Rhine, Lippe and Ruhr used in the industries.

- Availability of cheap water transport on R. Rhine used to transport raw materials to the industries and finished product to market.

- Abundant supply of power (coal) which is a raw material on the industry.

- Availability of capital from rich merchants.

- Availability of internal and external market in central and western Europe e.t.c.

10.ai) Irrigation scheme XYZ and main crop grown.

 X – Bunya – Rice

 Y – Parkera – Maize

 Z – Mwea Tebere – Rice

ii) Factors that have led to the location of irrigation scheme Y.

- To control the seasonal flood of river Perkera which used to devastate the area.

- To utilize the excess water of R. Perkera which used to go to waste.

- Presence of flat and gentle sloping terrain which enable easy flow of water by gravity, expensive pumping was not required and therefore it was cheap to start the project.

- The fertile loamy soils most of while are deposited by the flood, reduces use of fertilizers.

- The dry/ high temperatures of these areas necessitated use of irrigation as the only way to make food production possible/multiple cropping.

- The areas was sparsely populated hence reduced expenses of resettlement of people. 4 x 2 = 8mks

iii) State four problems experienced in irrigation project marked Z:

- Saltation of the canals reducing water levels and cost of dredging is high.

- Quelea birds destroy the crops.

- Waterborne diseases e.g. bilhazia/water related diseases e.g. malaria.

- Shortage of water during dry season

- Inadequate labour during planting.

- Inadequate capital to buy expensive required farm input. 4 x 1 = 4mks

b) What is a polcher

 It is a reclaimed piece of land from the sea in Netherlands. 2mks

c) Give five benefits of the Zeyder Zee projects.

- Lake Yssel provide fresh water to the providence of Novit Holland and Pries for irrigation/domestic/ industrial purposes.

- It has led to the creation of a fresh water lake. Lake Yssel. This lake supplies water to the nearby urban centres and industries in Northern Holland.

- The dykes and canal have improved the transport network. The road distance between North Holland and Fries land has been shortened.

- Lake – Yssel has considerably reduced the salinity of the polders. This has greatly promoted agriculture.

- The size of available arable land has increased, hence more food production.

- The tidal flooding has been greatly reduced by the construction of dykes.

- The project has resulted in a better drainage, not only within the scheme, but also in the surrounding area.

- The project has created more land for settlement and establishment of industries and public utilities like school and hospitals.

