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## GEOGRAPHY PAPER TWO MARKING SCHEMES

PAPER 2

# FORM FOUR MID YEAR EXAM JUNE 2017 PAPER TWO

#### **SECTION A**

#### **MARKING SCHEME**

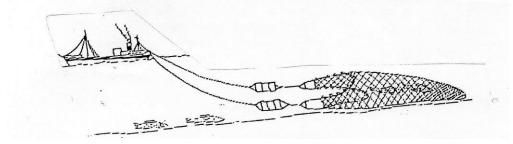
- 1. State four ways in which the Kenya government assists dairy Farmers. (4marks)
  - Setting up demonstration centers to create awareness on livestock management.
  - Improve transport
  - Improve pasture
  - Building watering points by constructing dams and sinking boreholes.
  - Opening Ranches
  - Improvement of breeds through cross-breeding
  - Providing extension officers/veterinary offices.
  - Building cattle dips
  - Create the market for livestock / kmc/kcc
  - Setting up anti-stock theft. Any 4 x 1 = 4marks
- 2. (a) What is a polder?

(2marks)

- Polder is the land reclaimed from the sea
- (b) State three benefits of the Zuyder Zee project in the Netherland (3marks)
- Increased the land for Agriculture
- -It has controlled the floods.
- -Has created land for settlement/urbanization
- -Increased foreign exchange
- -Creation of fresh water lake / provision of fresh water supply
- -Drainage system has been improved.
- -Road distance between North Holland and Eriesland was shortened.

Any  $3 \times 1 = 3 \text{marks}$ 

3. (a) Identify the fishing method represented by the diagram below (1mark)



**Trawling** 

 $1 \times 1 = 1 \text{mark}$ 

- (b) State three ways through which fish farming contributes to the economy of Kenya (3marks)
- provide an alternative source of protein
- -it saves foreign exchange
- -Encourages development of infrastructure.
- -It is a source of income for the farmers.
- -it creates employment opportunities
- -It promotes industrial development
- 4. (a)(i) State three way of promoting Eco-tourism in Kenya
  - It is encouraged by staring economic benefits accrued from tourism with local community
  - Local community takes free ride in wildlife buses into and out of game parks thereby becoming custodians of wildlife.
  - By telescopic viewing animals and their habitats are not interfered with.
  - Advice tourists in tourist's sites to following marked trails thereby not damaging environment.
  - Local community living around tourist sites should be involved in management and conservation of the environment.
  - Camping sites should replace building tourist loges.
  - Damaged land should be rehabilitation by planting trees and introducing animals in the areas.
  - Damaged crops and eaten live stocks should be compensated.
  - Proceeds from tourism should be used to develop roads, hospitals and schools.

Any  $3 \times 1 = 3 \text{marks}$ 

(ii) State three reasons why domestic tourism should be encouraged

in Kenya (3marks)

- To utilize facilities like hotels during low tourist season.
- In order for Kenyans' to learn more about their own country
- To create employment opportunities
- To facilitate interaction between different communities and thus enhance national unity/integration
- 5. (a) What is energy crisis?

(2marks)

-Energy crisis is a situation whereby the demand for oils is higher than the amount that is being supplied leading to high oil prices.

Or

- -Energy crisis is a situation where the prices of fossils fuel/oil rise uncontrollably as a result of short supply relative to demand.
- (b) State three advantages of using Hydro-electric power (3marks)
- It is non-exhaustible / renewable
- -Non pollutant/ clean to use
- -Relatively cheap
- -It is easy to use
- -Can be adjusted to any fraction of energy using transformer.
- -It is convenient to use in variety of
- $(3 \times 1 = 3 \text{marks})$
- 6. The table below shows the prices of sugar in Kenya shillings per ton in some countries in Africa.

Use it to answer questions (a)

YEAR	KENYA	SOUTH AFRICA	TANZANIA	ZAMBIA
2014	95,400	61,927	68,702	84,447
2015	111,713	67,462	66,985	93,798
2016	110,878	65,173	90,649	86,832

a)(i) Draw a divided rectangle 16cm long to represent the prices of sugar in the year 2016 (8marks)

$$110,878 + 65,173 + 90,649 + 86,832 = 353,532$$
 (1mark)

Length of bars

Kenya = 
$$\frac{110,878}{353,532}$$
 x 16 = 5.01cm = 5cm (1/2mark)

South Africa = 
$$\frac{65,173}{353,532}$$
 x 16 = 2.95 cm = 3cm (1/2mark)

Tanzania = 
$$\frac{90,649}{353,532}$$
 x 16 = 4.10cm = 4cm (1/2 mark)

Zambia = 
$$\frac{86,832}{353,532}$$
 x 16 = 3.93cm = 4cm (1/2 mark)

Divided rectangle showing prices of sugar in 2016

/	+ + + + +	0 0000	/ / / / /
KENYA	TANZANIA	ZAMBIA	SOUTH AFRICA
	+ + + + + +	0 0000	/ / / /
			/ / / / / /

Title (1mark)

Segments = mark each

Calculations = ½ mark each = (2 marks)

Rectangle (1mark)

Total (8marks)

(ii) State two advantages of using compound bar graph to present

statistical data (2marks)

- It gives a clear visual impression
- It allows for comparison
- Easy to read and interpret
- Can be used to present a wide range of data.

 $(2 \times 1 = 2 \text{marks})$ 

(b) State three physical conditions that favours cocoa farming in Ghana

(3marks)

- Well distributed rainfall throughout the year to enhance growth of cocoa.
- High rainfall / 1300 1500 mm per year to enhance growth of cocoa
- High temperature 24-30c to enhance the growth of cocoa
- Deep soils for proper anchorage
- Well drained soils for high production
- -High humidity 70 -80% to enhance availability of moisture in the soil
- Undulating low lands 0-70m above sea level
- -sunshine for ripening of cocoa pods
- -Shade from strong sun rays for the seedlings
- Shelter from strong winds for protection

(Any  $3 \times 1 = 3 \text{marks}$ )

(c)Describe the stages involved in processing of cocoa from harvesting

tomarket (8marks)

- Pods are cut using sharp knives
- -the pods are collected and pilled at a central place
- -the pods are split open using a sharp knife
- -the beans are scooped by hand
- -the cocoa beans are heaped on mats and covered with banana leaves to ferment for 5-6 days as the pulp drains away.
- -The fermented beans are washed and cleaned
- The beans are spread on tables covered with mats to dry in hot sun
- -the beans are turned frequently until they turn brown
- -the dry beans are packed in bags
- transported to the buying centers
- -the beans weighed, graded ready for export.

(Any  $8 \times 1 = 8 \text{marks}$ )

- (d) A part from making oil, give four other uses of oil palm (4marks)
- the leaves are used for roofing
- -the shells / fibers are used for fuel

- -the leaves are used for making baskets / hats/ mats/brooms
- the stems are used as building poles.
- the sap is used for making wine / alcoholic drinks
- -crushed nuts are used for animal feeds / fertilizer

(Any 4 x 1 = 4marks)

7(a) (i) Distinguish between a forest and forestry.

(2marks)

A forest is a continuous growth of trees and undergrowth covering large tracts of land while Forestry is science of developing, cultivating and managing forest resources.

- (ii) Name two indigenous softwood trees species found in Kenya
- Cedar / juniper
- Podo
- (b)(i) Characteristics of planted forests
- consist of one / pure tree species
- Trees occur in rows
- -harvested at the same time
- -trees are mainly softwood
- -trees mature fast
- Trees are easy to exploit / work on
- logs are light hence easy to transport

(Any  $3 \times 1 = 3 \text{marks}$ )

- (ii) Name two forest reserves in West of the Rift valley of Kenya (Any 3  $\times$  1 = 3marks)
- Kaptagat
- Malava
- Mt. Elgon
- Kakamega
- Mau
- Cheranganyi

 $(2 \times 1 = 2 \text{marks})$ 

b) (i) State four characteristics of temperate hardwood forests. (4marks)

- trees are deciduous and they shed leaves in autumn then remain leafless in winter
- Has a fewer number of trees species per unit area compared to tropical hardwoods
- -trees have bread leaves
- Most trees e.g redwoods are durable and strong
- -trees are less bulky so easier to exploit
- -most trees are of high commercial value

(Any 4 x 1 = 4marks)

- (ii) Explain any three problems which have limited exploitation of tropical hardwood forests in Africa (6marks)
- There is a wide variety of tree species per unit area thus make exploitation difficult
- The buttress roots make the trees difficult to cut / haul/ cumbersome to fall
- Forests have dense undergrowth trees are closely set thus exploitation / felling of trees is hard. Trees take long to mature 65-70 years / 100 years hence difficult to regenerate to sustain exploitation
- The forests are habitat to dangerous wild animals make exploitation insecure
- The hot and humid conditions encourage pests and diseases which are harmful to the lumbers' and also the trees
- The heavy rain throughout the year lead to muddy roads hence harder transportation of logs.
- The logs are hard and massive hence difficult to cut and transport
- Inadequate capital limit the use of modern techniques of exploitation of forest

(Any 3 explained pointed x 2 = 6 marks)

- c) Give the difference between exploitation of softwood forests in Kenya and Canada under the following headings: (2marks)
- i) Trees species (2marks)
- in Kenya the tree species comprise of both exotic and softwoods while in Canada the tree species are mainly indigenous and are of coniferous type.

- In Kenya the indigenous softwoods are Podo, African pencil, cedar and the exotic are cypress, fir, and wattle while in Canada the main tree species are pines, spruce and forg.

(Any  $1 \times 2 = 2 \text{marks}$ )

- (ii) Mode of exploitation
- In Kenya workers are transported daily to the logging sites since there are not camps in the forest for workers / workers live nearby while in Canada logging involves setting up of settlement for workers within the region being exploited / harvested.

 $1 \times 2 = 2 \text{ marks}$ 

## (iii) Marketing of products

• Kenya consumes most of the products locally but some are exported to Arabic countries, USA and Europe while in Canada most products are exported to USA, Europe, Britain but some is consumed locally.

 $1 \times 2 = 2 \text{marks}$ 

8 (a) State two characteristics of cottage industries in India

(2marks)

- It requires little capital to set up and run
- It is labour intensive
- It relies on simple equipment/tools
- Different establishments are owned by individuals / families
- Uses locally available raw materials
- The products are mainly for local market
- The industrial establishments are widespread in the country / located in homes.
- Labour is provided by family members

Any  $2 \times 1 = 2 \text{marks}$ 

- (b) Explain two ways in which each of the following factors influencing the location of industries in Kenya
- (i) Raw materials
- Perishable agricultural raw materials like tea and fish processing usually attract industries near them.

-Raw materials that are too heavy and bulky to transport to the factory like sugar refining the site of production to reduce transport costs.

-Industries linkage like chemical industries at Mombasa make use of the waste products of oil refining

Any  $2 \times 2 = 4 \text{marks}$ 

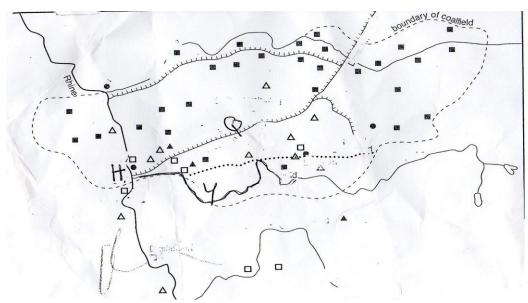
## (ii) Government policy

(4marks)

- The government may want industries to be located in the rural areas to reduce rural-urban migration which rots rural areas of able bodies' people leading to decrease in agricultural production.
- The government may also want to check, increasing congestion in already industrialized areas congestion make provision of services difficult.
- The government may want to encourage development in disadvantaged remote areas by requesting industries to locate there/industries may encourage the development of infrastructure as well as purchase of raw materials from the surrounding areas.
- The government may want to create more employment opportunities thereby raising the living standard of the people.
- The government may also have military strategic reason e.g locating industries far from areas which are far from potential enemies.
- The government have environmental consideration i.e locating industries far from populated areas due to pollution.

Any  $2 \times 2 = 4 \text{marks}$ 

(c)Use the map below to answer question c(i), (ii) and (iii)



(i) The river is Ruhr

(1mark)

(ii) Town marked H - Duisburg

(1mark)

(iii) Canal marked Q - Rhein - Herne

(1mark)

- (d) Explain three physical factors that aided iron and steel industries in Germany (6marks)
- Rivers Rhine, lippe and Ruhr provide water required for cooling machines in the industry/ industrial use.
- the area is served by navigable rivers Rhine and its tributaries which provide cheap transport for the raw materials to the factory and finished products to the market.
- the presence of large deposit of iron ore limestone and coal from the Rhine valley provided the raw materials needed in the iron and steel in the region.

Any  $3 \times 2 = 6$ 

- (e)Students intend to carry out a field study of a local Jua Kali industry in the local market centre.
- (i) State two reasons why it would be necessary for them to visit the area of study in advance. (2marks)
- To be able to formulate appropriate objective for the study
- to able to prepare appropriate questionnaire
- to establish the size of the factory / plant for proper planning.
- To find out possible problems likely to be experienced during the study.
- to seek permission
- to be able to prepare working schedule.

(Any 2 x 1 = 2marks)

- (ii) State two items you would include in your working schedule. Time for departure
- Time to collect data in the study
- Tim for lunch
- Time to end the study

(Any 2 x1 = 2marks)

(iii)Give two advantages of studying Jua kali industry field works. To be able to get firsthand information

To make learning interesting it breaks the classroom monotony It makes learning real It encebles one to share information

It enables one to retain information to learn.

It enables one to retain to apply skill learned in classroom.

9. (a) Define the term population structure

(2marks)

-This is the composition of the population in terms of sex, gender and age at a particular time.

(b) State four causes of rural to rural migration

(4marks)

- Pressure on land make people to buy / look for land elsewhere
- People move in search of employment
- Insecurity in some rural area make people to move to safer places.
- setting up of government development projects caused displacement of people.
- natural hazards force people to move to other areas for safety in search of pasture water for their livestock.
- changes in the land tenure system disputes cause people to move and settle elsewhere.

Any  $4 \times 1 = 4$ 

Explain how the following factors have influenced population distribution in Kenya

Relief (2marks)

- Mountains and Hilly areas have low temperatures/ are rugged and this discourages settlement / development of infrastructure agricultural activities.
- Gently sloping areas are densely populated because they are suitable for settlement and other economic activities.
- Flat areas/ depressions are sparsely populated because of poor drainage which cause swampy conditions / flooding

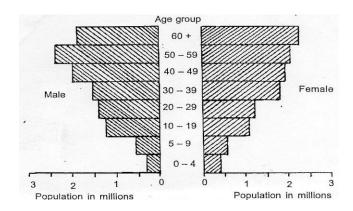
#### **Diseases**

 Areas infested with disease carrying vectors discourage settlement since the conditions are unhealthy.

### Drainage

- Low lying areas that are prone to periodic flooding water logging have sparse population because they are unsuitable for agriculture and other economic activities.
- Well drained areas attract settlement.

The pyramid below represent population structure of country.



- (i) Identify the stage in the demographic transition in which the country represented on the pyramid falls PHASE 4 / stage IV
- (ii) Describe the characteristics of the population as represented by the pyramid (4marks)
- Has small youthful population
- Has large ageing population
- Has low mortality rate
- High dependency ration of the elderly but low dependency of the youth
- The population has a long life expectancy
- The population has low birth rate.

(Any 4 x 1 = 4marks)

(iii) Explain four problems associated with the above population
pyramid (8marks)

- There is shortage of labour leading to a lot of spending on the importation of expertise / labour
- Reduce savings and investments most of the money is held by the ageing population
- Increased dependency ratio reducing savings by the few working population
- Underutilization of resources which slows down economic growth
- Production will be queried towards production of the aged commodities
- Rigidity to new scientific innovations.

 $4 \times 2 = 8 \text{marks}$ 

10. (i) Define the term environment

(2marks)

Refers to all external conditions surrounding an organism and which have influence over its behavior or activities (2marks)

- (ii) Name two components of environment that must be conserved (2marks)
  - Air
  - Water
  - Soil
  - Landscape and relief
  - Vegetation

 $1 \times 2 = 2 \text{marks}$ 

- (b)(i) State four reasons why it is important to manage and conserve the environment. (4marks)
- ensure proper utilization of resources without damage / waste/ depletion
- For sustenance of human life
- For protection of endangered species
- To preserve the aesthetic value of the landscape vegetation
- For posterity
- For its economic value since it is the source of natural resources
- to curb global warming

Any  $4 \times 1 = 4 \text{marks}$ 

- (ii) Apart from floods, name two common environmental hazards in Kenya. (2marks)
- Lighting
- Windstorms
- Pest and diseases
- Landslides
- Drought

(Any  $2 \times 1 = 2 \text{marks}$ )

(c)Explain three causes of floods in Kenya

(6marks)

- Excessive heavy rainfall in the catchment areas, causing excess water to accumulate in shallow basins and flat areas causing floods.
- -When there is a rise in level of water in the sea or lakes due to increase rainfall or submergence of coastal area.

- -when the rivers contain excess water which it cannot hold within the channel so the water spill over to surrounding area.
- When a dam built across a river/ valley brakes, so the water in the reservoir floods the lower stream
- -the areas covered by black cotton soils get saturated during the heavy rains thus the water spread on the surface causing floods.
- -blockage of drainage systems / channel in cities e.g. Nairobi causing flooding

(Any 3 explained x 2 =6marks)

- (d) Students from your school carried out a field study on environmental pollution in the county headquarters
- (i) Name two types of pollution they identified
- air pollution
- land pollution
- -sound pollution
- water pollutions

Any  $2 \times 1 = 2 \text{marks}$ 

- (ii) Give three causes of the high rate of land pollution in the town they are likely to find out.
  - Shortage of garbage bins and garbage collection trucks
  - Careless and irresponsible people who throw litter/ garbage anyhow
  - Laxity and delay in garbage collection
  - High turnover of garbage form the large population and many industries / factories
  - Ignorance among the residents on the importance of proper disposal of garbage
  - Failure by the local authorities to enforce by- laws pertaining to dumping of garbage

Any  $3 \times 1 = 3 \text{marks}$ 

- (iii)State four advice they would give to the local authority to control pollution in the town.
  - Ensure proper disposal of garbage by sorting it before it is disposed
  - Recycling of some of the wastes

- Discouraging disposal of industrial waste on the land
- Treatment of effluents from factories before treatment
- Regular inspection of factories to reduce release of toxic fumes in the atmosphere
- Education to members of the public on proper disposal of garbage and importance of conserving environment.
- Building to be soundproof
- People working in and near noisy industries to be protective gear e.g. ear plugs
- Prohibiting nightclubs in residential areas
- Vehicles to be fitted with silencers.
- Enhance law to govern against pollution and enforcing the laws as well.