312/2 GEOGRAPHY Paper 2 JUNE 2023 Time: 2³/₄ hours

KASSU-JET JOINT EXAMINATION Kenya Certificate of Secondary Education 312/2 Paper 2 GEOGRAPHY

MARKING SCHEME

SECTION A

Answer all the questions in this section

1 (a) What is practical geography?

(2 marks)

- Practical geography is the study of practical skills which enhances interpretation and understanding of geographical phenomena.
- (b) State *three* practical skills learned in practical Geography. (3 marks)
 - Map reading
 - Photograph interpretation
 - Data analysis
 - Methods of data connection
 - Methods of data recording
 - Methods of data presentation.
 - Time management
- 2. (a) Name *two* methods of underground mining.

(2 marks)

- Shaft method
- Drilling method
- Solution method
- Adit method
- (b) Give *three* ways in which derelict land can be reclaimed.

(3 marks)

- Planting trees
- Creating a park to attract tourist
- Introducing agriculture

		Landscaping for settlement/farmingRefilling the holes			
3.	(a)	Name <i>two</i> cereals grown in Mwea Tebere.	(2 marks)		
		- Rice			
		- Maize/popcorns			
		- Green grams			
		- Beans			
	(b)	State <i>three</i> ways in which salinity of the folders is reduced in the	e Netherlands (3 marks)		
		- Chemicals are applied to lower salts in the soils.			
		 Fresh water is flashed to the soils to remove excess salts. 			
		- Reeds are planted to use up the excess salt.			
		- Continuous pumping of water from the polders.			
4.	(a)	Give <i>two</i> methods used in deep sea fishing.	(2 marks)		
		- Trawling			
		- Drifting			
		-			
		- Line fishing			
	(b)				
			(3 marks)		
		- Some fishing areas are far from the markets and roads are	e in poor		
		condition thus fish goes bad enroute.	The proof		
		- Fishermen lack appropriate storage and preservation faci	lities.		
		- There are imited local markets due to cultural beliefs.			
		- The external markets are limited by tight restrictions/com	petition from		
		other producers.			
		- The limited number of fish species limits the market.			
5.	(a)	a) Name <i>two</i> towns in Kenya where motor vehicle assembling plan			
		- Nairobi			
		- Mombasa			
		- Thika			
	(b)	Give <i>three</i> characteristics of the cottage industry in India.	(3 marks)		
		- They rely on simple machines			
		- They are labor intensive			
		- They are owned by families			
		- They use locally available materials.			
		- They producefor local markets			

They are widespread in the country.

SECTION B

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

6. The table below shows four principal crops produced in Kenya in 2000 and 2001. Use it to answer question a and b.

Crop	Amount in metric tons		
	2000	2001	
Wheat	70,000	130,000	
Maize	200,000	370,000	
Coffee	98,000	55,000	
Tea	240,000	295,000	
TOTAL	608,000	850,000	

- (a) (i) Which crop had the highest change in production between 2000 and 2001? (2 marks)
 - (ii) Calculate the percentage increase in crop production in Kenya between 2000 and 2001. (2 marks)
- (b) Using a scale of 1cm to represent 100,000 metric tons, draw compound bar graphs to represent data on the table above. (7 marks)
- (c) (i) What is dairy farming?

(2 marks)

- This is the practice of keeping cattle for milk/the rearing of cattle for the purpose of milk production.
- (ii) Name *two* exotic dairy breeds of cattle reared in Kenya. (2 marks)
 - **V**Fresian/Holstein

Ayshire

Guernsey

Jersey

- Alderney
- Swiss brown
- (iii) Explain the problems facing dairy cattle farming in Kenya. (4 marks)
 - Stiff competition from imported milk and milk products makes the industry unstable.
 - Poor management of dairy co-operatives result to misappropriation for funds hence delayed payment to farmers.
 - Inadequate capital to buy the necessary farm inputs hence minimizing mechanization of the farming/makes it difficult to plan ahead.
 - Prolonged drought/unreliable rainfall leads to shortage of pasture leading to poor quality breeds.

- Outbreak of diseases weaken and even kill the cattle which is a loss to farmers.
- Expensive farm inputs leads to reduced quality hence reducing profit margin.
- Inadequate feeds/water during the dry seasons leads to undernourishment of cattle and thus low yields.
- Stiff competition from alternative land uses e.g. horticulture, tea and coffee lowers the quantity of milk products.
- Low prices make farmers unable to plan ahead.
- Poor storage facilities/cooling centres cause the milk to go bad leading to heavy losses to farmers.
- Exploitation by middlemen leads to low prices.
- Poor feeder roads in the production areas makes the milk perish before reaching the markets creating loss to farmers.
- (d) (i) Explain why dairy farming is highly developed in Denmark than Kenya. (4 marks)
 - Denmark's dairy farming is highly mechanized since capital is available that leads to high production while in Kenya, there is limited mechanization due to inadequate capital
 - Dairy farming in Denmark is highly specialized while in Kenya most farmers practice mixed farming.
 - Dairy farming in Denmark is least affected by climatic variations.
 - In Denmark artificial Insemination (AI) or extension services are widely used unlike in Kenya artificial insemination or extension services are limited to few farms.
 - Research is widely/extensive while research in Kenya is limited.
 - In Denmark co-operative movement is highly developed while in Kenya dairy co-operative movement is less developed.
 - (ii) Give *two* significance of dairy farming in Kenya and Denmark.

(4 marks)

Export of some milk and milk products earns the country foreign exchange.

Milk is a raw material for milk processing industries hence promote industrialization.

- Many people are employed in dairy farms in may parts of the country.
- Commercial dairy farming is a source of income to the farmers.
- Dairy farming has contributed to the development of roads in areas where it is practiced.
- Milk and milk products are a source of nutrious nutritious food especially in vitamins and proteins.
- The government collects revenue through taxation on sale of dairy products.
- 7. (a) (i) What is forestry? (2 marks)

- It is the science of planting and managing and exploitation of forest resources.
- (ii) State *three* significance of agro-forestry. (3 marks)
 - It maximizes land use as both crops and trees are a source of income
 - *It provides raw materials for the industries*
 - It promotes high water retention on the land
 - The trees supply wood fuel needs.
 - The leaf litter decomposes thus adding humus to the soil.
 - Livestock waste is used as manure.
 - Some trees provide fodder for the animals.
 - Some trees have medicinal value.
 - Trees provide aesthetic beauty.
 - It helps to conserve soil by minimizing soil erosion.
 - Trees act as wind breakers to the young crops.
 - Trees creates a micro-climate
- (b) (i) Name *three* indigenous hard wood tree species in Kenyan forests.

(3 marks)

- Meru oak
- Camphor
- Elgon teak
- Mangrove
- Mvuli
- East Africa Olive
- (ii) Explain *four* problems facing natural forests in Kenya today.

(8 marks)

- Increased human population leading to illegal encroachment for settlement and agriculture thus destroying large forested areas.
- Increased population of wildlife animals that debark or uproot trees thus destroying large forested areas. Eg. Elephants.

Forest fires destroy large areas of forests which take long time to recover.

Prolonged drought that dry and degenerate forest trees which take long time to recover.

- Plant diseases and pests which attack trees e.g. the white aphid which attack and destroy some valuable planted trees species reducing land under forest.
- Over exploitation of some tree species which take long to mature.
- Government policy of de-gazetting some forests has led to clearing of many forested areas.
- Illegal logging thereby reducing the indigenous tree species.

(c) (i) Name *two* areas under large scale softwood forests in Canada. (2 marks)

- New found land
- Nova scotia
- British Columbia
- New Brunswick
- Prince Edward Island
- (ii) Compare forestry in Kenya and Canada under the following subheadings.
 - Period of tree harvesting.

(2 marks)

- In Canada logging is done in winter and early spring while in Kenya cutting is done throughout the year
- Tree harvesting

(2 marks)

- In Canada, it is done through clear cutting while in Kenya it is done through selective cutting
- Transportation of logs.

(2 marks)

- In Canada logs are transported using melt water in rivers while in Kenya transportation is by roads.
- In Kenya transportation is expensive while in Canada it is cheaper.
- 8. (a) (i) What is visible trade?

(2 marks)

- Visible trade involves exchange of goods between countries/
- Visible trade involves import and export of goods
- (ii) Suppose you were an international business man, list *three* industrial goods you would import from Japan. (3 marks)
 - Automobiles/Motor vehicles parts
 Textiles

Machinery/electronic appliances/radios/TVs

- Watches/precision instruments
- (b) Explain *four* factors that influence internal trade in Kenya. (8 marks)
 - The demand for a variety of domestically produced goods, leads to expansion of trade.
 - The cultural differences lead to distinctive specialization in production of goods for exchange.
 - The production of similar goods/products by different regions limits the market potential./Different goods enhance trade among different regions.
 - The low purchasing power by a majority of Kenyans limits the market for goods produced.

- The level of development of transport network/limit/enhances trade as certain commodities may not/may be carried over long distances/the market potential is restricted/expanded.
- Security encourages expansion of trade.

NB:/Explanation alone cannot score but factor alone can score.

(c) Why do you think trade is important in Kenya?

(4 marks)

- Trade generates revenue through taxation of the goods and services.
- Trade creates employment opportunities in the industries that are established/creates self employment.
- The demand for goods stimulates industrial growth/agric growth.
- The exports of goods enable the country to earn foreign exchange.
- The need to reach far off markets leads to expansion of transport facilities.
- Trade stimulates specialization in the production of goods.
- Trade enhances cooperation between Kenya and the trading partners.
- (d) Explain *two* benefits which member states of ECOWAS derive from the formation of the trading bloc. (4 marks)
 - The volume of trade has been boosted as a result of an expanded market in the region.
 - More transport facilities have been constructed to link the member states of the Cooperation.
 - The removal of trade barriers has extended the market for the finished products/secured the market for the member states.
 - The transfer of technology/capital within the trading area has been enhanced.
 - Cooperation in other fields such as education/health and communication has been enhanced.
 - The reduction in hostilities between member countries has enhances peace resulting in rapid economic development.
- (e) Your class intends to carry out a field study on the Nairobi Internation Trade Fair.
 - (i) State *two* methods you would use to collect data. (2 marks)
 - Administering questionnaires
 - Interviewing respondents
 - Sampling
 - (ii) State *two* reasons why a pre-visit will be necessary. (2 marks)
 - To seek permission from relevant authorities/to get relevant documents from officials.
 - To determine the appropriate route to be used.
 - To identify the appropriate methods of data collection.
 - To estimate the cost the study
- 9. (a) Distinguish between population distribution and population density.

(2 marks)

(b) The table below shows the population of a country in Western Europe in 1000. Use it to answer part (i) – (iii).

Age group	Male	Female
0 – 4	450	455
5 – 9	447	449
10 - 14	448	450
15 - 19	454	458
20 – 24	480	472
25 – 29	630	632
30 - 34	635	639
35 – 39	642	671
40 – 44	670	638
45 – 49	636	568
50 - 54	562	641
54 - 59	633	639
60 - 64	631	634
65 - 69	451	452
70 – 74	470	468
75 – 79	460	459
80+	451	453

- (i) Using a scale of 1cm to 100,000 people, draw a population pyramid from the above data. (7 marks)
- (ii) State *five* characteristics of the above population structure as shown by the pyramid. (5 marks)
- (iii) Explain *four* problems likely to be experienced due to the population trend in the above country. (4 marks)
- (c) (i) What is mortality rate? (2 marks)

Mortality rate is the total number of deaths in a population of a given sex and or age.

- (ii) State *five* measures that have been taken in Kenya to reduce infant mortality. (5 marks)
 - Free drugs for infants
 - Adequate pre-natal and emotional support
 - Improvement in use of skilled care to the new born
 - Medical covers that cater for safe child delivery
- 10. (a) Differentiate between environmental conservation and environmental management. (2 marks)

- Environmental Management refers to the effective planning and controls used for sustainable exploitation and improvement of the environment while Environmental Conservation refers to the preservation and protection of natural environment from destruction by careful use and improvement of the environment.
- (i) State *five* ways in which the government of Kenya promotes environmental conservation. (5 marks)
 - Creating public awareness and education on the importance of a clean environment.
 - The government has passed legislations to enforce proper use of the environment
 - Recycling factories and centres have been set-up to recycle garbage and waste.
 - Government is a signatory to Kyoto protocol on global warming and it is in the forefront in criticizing those countries that are less supportive to the process of combating global warming.
 - Non-governmental organizations such as greenbelt have been given the mandate to protect the environment by planting trees.
 - The government have formed the national environmental management authority (NEMA) which is a body charged with the responsibility of ensuring that the environment is properly conserved and managed.
- (ii) Give *four* reasons why it is necessary to conserve the environment. (4 marks)
 - It helps to maintain soil fertility for sustainable food production.
 - It helps to preserve genetic resources for future generation.
 - It helps to preserve aesthetic value and provide recreational facilities which promotes tourism.
 - It helps to sustain raw materials for some manufacturing industries that produce goods for trade.
 - It helps reduce the pollution that cause diseases to animals and plants to ensure good health.
 - It helps to maintain natural habitats for both plants and wild animals.
 - It helps in protecting the water catchment areas and sustain the hydrological cycle.
 - It helps to prevent desertification which destroys environmental resources.
 - It helps to ensure proper utilization of available natural resources without destruction.
 - It helps to sustain human life with required resources and by preventing pollution.

- (b) (i) Apart from floods, name *three* other environmental climatic hazards. (3 marks)
 - Floods
 - Desertification
 - Landslides
 - Hailstorms
 - Heat waves
 - Lightning and thunderstorms
 - Dust storms and windstorms
 - (ii) Name *three* areas prone to flooding in Kenya.

(3 marks)

- River Nyando
- River Nzoia
- River Yala
- River Tana
- River Nyamasaria
- River Ewasonyiro
- (iii) Explain *four* measures that can be used to control floods in Kenya today. (8 marks)
 - Construction of check dams across the rivers to hold the excess water in order to reduce river volume.
 - Construction of artificial levees/dykes long the river banks to increase their height and prevent water from overflowing into the flood plain.
 - Construction of drainage channels to make them hold excess water from the land.
 - Dredging and widening the river channels to make them hold excess water.
 - Planting trees in the catchment areas to increase water infiltration and reduce surface run off.
 - Redirecting some river tributaries to other rivers to reduce the water volume of the main river.