

K.C.S.E GEOGRAPHY 2008 PAPER 312/2
MARKING SCHEME

SECTION A

1. - Vegetation is cleared by slashing and burning.
- There is the use of little or no manure/use of ash.
- The land is communally owned.
- The yields decline after a certain period of continuous use. The land is abandoned when the yields decline.
- Both the settlements and plots are temporary.
- Farming depends mainly on family labour.
- The farmers use simple implements.
- It is mainly for subsistence.
- Plots are small and scattered. (Any 4 × 1 = 4 marks)
2. a) Distribution of softwood forests:
In Kenya, softwood forests are found mainly in the highlands while in the Canada they are found both in highland and lowland areas
- In Kenya, softwood forests cover a small percentage of the total land area while in Canada they cover large tracts of land (Any 1 × 2 = 2 marks)
- b) Transportation of the logs:
- In Kenya, logs are transported by road/trucks while in Canada transport is mainly by water/by rivers.
- In Kenya, transportation is expensive while in Canada it is cheap. (Any 1 × 2 = 2 marks)
3. a) Land reclamation is the process of converting less productive land into a more productive state for agricultural or settlement purposes while land rehabilitation is the process of restoring degraded/impooverished/ damaged land back to a useful state. (2 marks)
- b) i) Low prices of rice
- Diversifying the crops produced in the scheme.
- Improving the quality of the rice produced through research.
- The government should restrict the importation of rice to reduce competition.
- Improve the marketing strategies to enable farmers to source for market outside Kenya. (Any 2 × 1 = 2 marks)
- ii) Fluctuating water levels in the irrigation canals
- Continuous dredging of canals/deepening of canals.
- Construction of dams to store water for use during dry seasons.
- Government to enforce laws on proper land use in the catchments areas of the rivers that supply water to the scheme. (Any 2 × 1 = 2 marks)
4. To maintain the genetic diversity/genetic pool.
To preserve wildlife for future generation/posterity.
To protect the endangered species of plants and animals.
To ensure sustainable utilization of species.
To attract tourist to earn foreign exchange.
To use wildlife for research/for education.
To maintain aesthetics for recreation.
To provide material for medicinal extracts. (Any 5 × 1 = 5 marks)

5. a) - It has created a large market for goods produced in member countries.
 - It has resulted in the availability of a variety of goods.
 - It has led to establishment of common tariff.
 - The removal of visa requirements has made it easier for traders to move across borders within the region. (Any 2 × 1 = 2 marks)
- b) - Membership to different trading blocks by different countries.
 - Lack of common currency.
 - Underdeveloped infrastructure/poor transport network.
 - Restriction for movement of people and goods.
 - Production of similar goods.
 - Political instability.
 - Political differences. (Any 4 × 1 = 4 marks)

SECTION B

6. a) i) Ground/Ground close up (1 mark)
- ii) - On the foreground there is bare ground with cattle browsing.
 - In the middle ground there is a herdsman and some cattle on the move/raising dust.
 - There is road in the middle ground.
 - At the background there are some patches of grass and some trees/shrubs/ thickets.
 - Some parts of the background are bare surface. (Any 3 × 1 = 3 marks)
- iii) - The cloudless sky.
 - The malnourished/thin animals.
 - Dust raised by moving animals.
 - Bare ground/scarce vegetation/patches of vegetation/patches of dry/brown grass/
 bare trees. (Any 3 × 1 = 3 marks)
- b) i) the pastoralists keep mainly indigenous breeds such as Zebu and Boran (2 marks)
- ii) their movement is seasonal; during the dry season the pastoralist migrate with the livestock to the highlands where there is pasture and water; during the wet season they move to the plains since pasture is available (2 marks)
- iii) - Some cattle are sold to slaughter houses/ to individuals.
 - Some pastoralists sell their livestock through community groups/ranches.
 - Some livestock are sold to the livestock marketing department.
 - Some pastoralists sell their animals to Kenya Meat Commission. (Any 3 × 1 = 3 marks)
- c) i) - It is a form of insurance against natural calamities such as diseases and drought.
 - Animals are kept as a sign of wealth/prestige/social status.
 - Animals are kept for use to pay dowry.
 - Animals are used as a source of food/milk/meat and blood. (3 marks)

- ii) - It encourages research the cross-breeding of traditional cattle breeds with exotic ones. This improves the quality of the animals/cross breeds are more resistant to diseases than pure exotic breed.
- It strengthens community education to teach beef cattle farmers better livestock management.
 - It sets up demonstration ranches for farmers to learn new trends in livestock management.
 - It has constructed roads to make services accessible to farmers/make transportation of animals to markets easier.
 - It encourages the replacement of the coarse grass with nutritious pasture to improve the quality of animals.
 - It has sunk bore holes/dug wells/constructed dams to provide water for the animals.
 - It has revived Kenya Meat Commission (KMC) a government parastatal that buys animals from farmers for slaughter. (Any 4 × 2 = 8 marks)

7. a) i) - National census report
- Text books
 - Magazines
 - Periodicals
 - Statistical abstracts (Any 2 × 1 = 2 marks)

- ii) - the number of male and female is almost equal at all ages
- the aging population is low from age 65 and above
 - the number of infants from age 0-4 is high/the population has a high birth rate
 - the dependency ratio is high
 - the middle age/working population is low (Any 3 × 1 = 3 marks)

b) i) $28.7 - 21.4 = 7.3$

$$\frac{7.3}{21.4} \times \frac{100}{10} = 3.4\% \quad (2 \text{ marks})$$

- ii) - Early marriages: many people in Kenya get married early and this allows them a longer period of fertility resulting in many children being born
- Improved medical care: This leads to higher chances of survival for both the mothers and infants as well as the general population, thus increasing the survival rates
 - Improved diet: this results into better health for the entire population hence reducing the mortality rate
 - Cultural beliefs: some cultures encourage large families due to the preference of one gender to other/some cultures/discourage the use of contraceptives/family planning leading to couples getting merry
 - Migration: political instability in neighbouring countries e.g. Somali, Sudan, Ethiopia there was an influx at refugees leading to high population (Any 4 × 1 = 4 marks)

- c) - It leads to a high dependency ratio resulting into little savings by the working group/low investments/low living standards/there is likely to be a high rate of unemployment since job opportunities may not increase at a rate that can cope with the increasing number of job seekers/may increase the rate of crime.
- It increases the demand for social amenities leading to congestion in schools, hospitals/housing/transport-facilities.
 - It increases demand for food which may lead to food shortage.
 - It increases demand for agriculture land causing land fragmentation/landlessness/destruction of forests expenditure while meeting demands for the large population reduces revenue that would be used for development of income generating projects hence slow economic growth.
- (Any 3 × 2 = 6 marks)

- d) climate: - the cool and wet climate/ hot and wet/high and reliable areas are densely populated because. They are suitable for farming hot dry areas have sparse population because they are unsuitable for arable farming.
- Relief: - mountains and hilly areas have low temperature/ are rugged discourages settlement/ development of infrastructure/agricultural activities plains and gently sloping areas are usually densely populated areas and depression are sparsely populated because of poor drainage, which causes swampy conditions/flooding.
- Soil: - Fertile soils are suitable for agriculture thus attracting large population areas that have poor soils have sparse population.
- Pests and diseases:- Areas that are infested with pests and disease-carrying vectors discourages settlement since the conditions are unhealthy.
- Drainage: - Low-lying areas that are prone to periodic flooding and water logging have sparse population because they are unsuitable for agriculture and other economic activities well drained areas attract settlements.
- (Any 4 × 2 = 8 marks)

8. a) i) 1668446: 5
333689 .2 tonnes (2 marks)

ii) = 458931 tonnes (1 mark)

- iii) It is a raw material for making glass.
It is used in making detergents.
It is used in some chemical industries.
It is used as a water softener/water treatment.
It is used in desulphurising steel.
It is used in paper industries.
- (Any 3 × 1 = 3 marks)

b) i) E - Main shaft vertical shaft
F - Tunnel/horizontal shaft
G - Mineral ore (3 marks)

ii) Sometimes, mines get flooded with subterranean water; there are occasional emission of poisonous gases in the mines; the dust produced causes respiratory diseases; sometimes tunnels collapse causing deaths of miners.

(Any 2 × 1 = 2 marks)

- c) Gold is highly priced, thus it earns foreign exchange, which is used to improve other sectors of the economy
 Gold provides raw materials for industries that make jewellery and other highly value items thus promoting industrial expansion
 Gold as a medium of exchange in the world is used in South Africa as a means of paying international debts
 Gold mining industry has generated employment opportunities, which raises the standard of living of the people
 Gold mining has led to the development of towns in the Rand and the Orange free state creating a large demand for agricultural products
 Mining of gold has led to the expansion of infrastructure such as transport and communication which have led to cheaper/ faster movement
 Gold mining has led to the development of industrial mining skills that are useful in other sectors of the economy
 (Any 4 × 2 = 8 marks)

- d) - The dumping of rock waste has led to the loss of biodiversity/destruction of natural vegetation.
 - Dereliction of land due to dumping of waste materials/is an eye sore destroys the natural beauty of the land.
 - Pollution of the areas by noise/blasts/smoke and water pools are all health hazards.
 - Mining destructs the water table which may lead to shortage of water.
 - Mining takes up land that would have been used for agricultural thus interfering with food production.
 - Mining displaces human settlements thus disrupting people and necessitating expensive resettlement processes.
 (Any 3 × 2 = 6 marks)

9. a) - Well drained fertile soils
 - Gently sloping undulating landscape
 - High rainfall 100 to 1500 mm well distributed throughout the year
 - Moderate to high temperature 20°C – 28°C
 - Long periods of sunlight
 (Any 3 × 1 = 3 marks)

- b) - The land is cleared of its natural vegetation.
 - It is ploughed using either tractors or ox-drawn ploughs.
 - Harrowing is done to loosen the large lumps of soil .
 - Shallow furrows are dug at intervals of 1.2 and 1.8 metres apart.
 - Cutting seed cane are planted in the furrows top dressing/ nitrogen fertilizers are applied.
 - Weeding is done regularly/herbicides are applied after 18 months the cane is ready for harvesting.
 - The cane is cut/ harvested using pangas. The harvested cane is loaded into lorries for transportation to the factory.
 (Any 6 × 1 = 6 marks)

- c) - Pests such as termites and white grub and diseases such as ratoon stunting and smut attack the plants and lowers the yields leading to low income for the farmers.
 - Accidental fires/fires set by arsonists destroy the cane resulting in heavy losses to the farmers.

- Flooding of market by cheap imported sugar results in unfair competition thus causing delay in payment to the farmers
- Delays in harvesting reduces the quality and tonnage of the cane reducing the farmer's earnings
- Closure of some factories such as Ramisi and Miwani had deprived farmers of their source of income/annual closures of factories for servicing of machines disrupts the farmers calendar of activities.
- Poor roads in some areas leads to delayed delivery of the cane to the factory lowering the quality and subsequently the profit to the farmers.
- Prolonged droughts in some areas destroys the crop leading to heavy losses.
- High cost of farm input reduces the farmers profit margins.
- Mismanagement of factories and cooperatives leads to delayed payments thus discouraging the farmers. (Any 5 × 2 = 10 marks)

- d) i) weighing of the cane - drying
- chopping of the cane - grading
- crushing of the cane - weighing
- boiling - packing/bagging
- filtering - centrifuging
- grading - crystallization
- crushing - bleaching (Any 4 × 1 = 4 marks)

- ii) - molasses
- bagasse
- wax
- acetic acid
- filter cake/filter mud (Any 2 × 1 = 2 marks)

10. a) i) Canada
- ii) - The convergence of the warm and cold currents causes upwelling of ocean water which bring minerals for planktons to the surface attracting large number of fish to the area.
- The convergence of warm and cold currents modifies the temperature of the ocean water making the area ideal for fishing throughout the year.
- The cool waters favour survival of a wide variety of fish species which makes the area an important fishing ground. (Any 2 × 2 = 4 marks)

- b) - The area has a broad shallow continental shelf which provides suitable conditions for the growth of plankton used by fish as food.
- The region experiences low temperatures that are favourable for the survival of fish for preservation/storage of fish due to the ruggedness of the land bordering the shaded areas the short growing seasons, many people therefore concentrate on fishing as an alternative economic activity.
- The hinterland is densely/populated thus providing ready market for the fish.
- Advanced technology has resulted in highly developed ship building/fishing vessels are equipped with modern preservation facilities, thus making it possible for fishermen to carry out large scale fishing.
- The indented coastline provides ideal fish breeding sites/sheltered bays are ideal for setting up fishing villages and ports. (Any 3 × 2 = 6 marks)

- c) - There are numerous inland fishing grounds such as lakes and rivers which are accessible to many people.
- There is low demand for sea fish compared to fresh fish making fresh water fishing more preferable.
 - The narrow continental shelf along the coast of East Africa limits the growth of plankton thus limiting the breeding of fish limiting the variety of edible fish.
 - The stiff competition in the open sea from the industrialized countries whose fishermen use modern fishing equipment discourages local fisherman.
 - The limited technology and inadequate capital make it difficult to develop marine fishing.
- (Any 3 × 2 = 6 marks)

- d) i) - A bag-shaped net is attached to a trawler/ship.
- The net is cast into the water by the trawler.
 - The net's mouth is kept open by otter boards head beam.
 - The upper part of the net is kept afloat by corks/floats.
- Weights are used to keep the lower part of the net at the sea bed.
- The trawler drags the net along the sea bed.
- After sufficient fish has been caught, the net is hauled onto the trawler to empty the fish.
- (Any 5 × 1 = 5 marks)

- ii) - Canning
- Freezing
 - Smoking
 - Salting
 - Sun-drying
- (Any 3 × 1 = 3 marks)