

**CEKENAS END OF TERM TWO EXAM-2022**

***Kenya Certificate of Secondary Education. (K.C.S.E)***

**MARKING SCHEME**

**SECTION A**

1. a) Define mining (2marks)

**-Mining is the extraction of valuable minerals from the earth’s crust**

b) Give three ways in which minerals occurs (3mks)

* **beds and seams**
* **As weathering products**
* **As alluvial deposits**
* **Veins and lodes**

2a) Apart from tropical hardwood forest name two other types of natural forest (2mks)

* **Coniferous forest**
* **Temperature hardwood**
* **Mangrove forest**
* **Mixed forests**
* **Mountain forest**

b) State three characteristics of tropical hardwood forests that make it difficult to exploit (3mks)

* **Trees occur in mixed stand**
* **Trees have lianias/buttress roots**
* **Trees are usually heavy**
* **Trees have huge trunks**
* **Trees takes long to mature**
* **Trees grows close to each other / thick forests**

3a.) Name two breeds of dairy cattle reared in Kenya (2mks)

* **Frieshian / Holstein**
* **Jersey**
* **Guernsey**
* **Ayrshire**
* **Alderney**
* **Swiss brown**

b) State three human factors that favour dairy farming in Denmark (3mks)

* **Availability of markets**
* **Availability of extension services**
* **Well-developed transport/communication network**
* **Plenty of fodder**
* **Advanced technology / skills**
* **Well-developed co-operative movement/ availability of capital**

4. (a) Differentiate between fishing and fishery (2mks)

* **Fishing refers to catching aquatic resources while a fishery is a water body from which aquatic resources are got**

b.) State measures used by the government to conserve marine fisheries (3mks)

* **Restocking overfished areas**
* **Licensing fishermen to reduce their number**
* **Enacting laws against water pollution**
* **Standardizing size of net**
* **Banning fishing in certain seasons/ part of the sea**
* **Enforcing international agreements**

5a.) State three physical factors which influences the location of statements (3mks)

* **Water supply**
* **Availability of land**
* **Gently sloping land**
* **Absence of pests/ diseases**
* **Fertile soils**
* **Suitability of climate**
* **Good drainage**

b.) Identify two functional zones of ideal urban Centre (3mks)

* **Central business district(**CBD)
* **Transitional zone**
* **Industrial zone**
* **Residential zone**
* **Sub-urban zone**

 SECTION B: ANSWER QUESTION 6 AND ANY OTHER TWO

6.) The table below shows tonnage of trade world in 2005 and 2006. Use it to answer question (a) and (b)

|  |  |
| --- | --- |
| Place of origin |  Tonnage per year |
| 2005 | 2006 |
| Europe | 942000 | 985000 |
| Africa | 120000 | 154000 |
| Asia | 97000 | 128000 |
| North America | 94000 | 103000 |
| Australia and New Zealand | 19000 | 24000 |
| All other countries | 29000 | 41000 |
| TOTAL | 1301000 | 1435000 |

a.i) which continent had the highest increase in tonnage of trade item in Kenya between 2005 and 2006 (1mk)

* **Europe**

ii.) Calculate the percentage increase trade tonnage from Australia and New Zealand between 2005 and 2006 (2mks)

**2006 = 24000**

**2002 = 1900**

**Difference = 5000**

**=**$\frac{5000}{1900} x 100\%$

 **= 26.3% or 26** $\frac{6}{19}$ **%**

 **Or 26%**

.iii) Draw a divided rectangle 15cm long to represent the tonnage of trade items in Kenya in 2006 (8mks)

 **Europe =** $\frac{985000}{1435000} x 15$ **cm = 10.30cm**

 **African =** $\frac{154000}{143500} x 15$**cm =1.6cm**

 **Asia =** $\frac{128000}{1435000} x 15$**cm =1.34cm**

 **North America =** $\frac{103000}{1435000} x 15cm$ **=1.10cm**

 **Australia and New zea land**$\frac{24000}{1435000} x 15cm$ **=0.25cm**

 **All other countries =**$\frac{41000}{1435000} x 15cm$ **= 0.43cm**



bi.) State two advantages of using divided, rectangles to represent geographical data (2mks)

* **Divided rectangles are easy to interpret**
* **They can be used to represent a wide range of data**
* **Easy to draw**
* **They give a clear visual impression**
* **They allow for comparison**

ii.) State four reasons why in 2005 and 2006 there was higher tonnage for trade items from Europe compared to that from Africa continent (4mks)

* **Low level of technology Africa limits production of proceed goods**
* **Different political ideologies among member countries in African restrict trade**
* **Insufficient transport facilities between Kenya and other different countries in Africa limits volume of trade**
* **Political instability / civil war in some part of Africa limit trade**
* **Trade in Kenya still follow pattern i.e. Kenya was colonized by Britain (Europe) hence established trade / political pattern**
* **Ignorance of what is produced in member countries of Africa.**
* **Most of the countries in Africa produce similar goods to that of Kenya hence low volume of trade**

c.) Explain four ways through which the Kenyan government is promoting external trade (8mks)

* **Signing international trade agreements with other countries like in COMESA to increase volume of export**
* **Establishing the export processing zones (EPZ ) to produce more goods for export**
* **Reducing import duty on raw materials to attract more industrial for products export**
* **Encourages foreign investors to establish industries to increase export of goods**
* **Introduced export compensation scheme on raw materials for producing export goods**
* **Participating in trade fairs and international exhibitions to display export items so as to have a wider market**
* **Improving transport and communication for easy flow of raw materials to the industries /commodities to the market**
* **Looking for new markets especially in the far East to expand export market**
* **Licensing investors willing to engage in export trade**
* **Encouraging industries/ farmers to produce quality goods for export**

7a(i) State three physical conditions that favour sugarcane farming in Kenya (3mks)

* **High temperature (20-27o C)**
* **Gently sloping land/undulating land**
* **High rainfall (1200-1500mm) well distributed throughout the year**
* **Sunny condition for sugar concentration**
* **Deep well drained day/black cotton soils**

ii) Apart from Bungoma name two counties where sugarcane is grown on large scale (2mks)

* **Kakamega**
* **Kisumu**
* **Siaya**
* **Busia**
* **Migori**
* **Kwale**

bi.) Describe the cultivation of sugarcane in Kenya (6mks)

* **Land is cleared of vegetation and ploughed**
* **Harrowing is done to loosen the large lumps of soils**
* **Shallow furrows are dug 1.2 – 1.8m apart cutting are planted in the furrows**
* **Top dressing fertilizers are applied**
* **Weeding is done regularly/ herbicides are applied**
* **After 18month the cane is ready for harvesting**
* **The cane is cut using pangas**
* **The cut cane is loaded into lorries for transportation to the factory**

ii.) Explain four problems facing sugarcane farming in Kenya (8mks)

* **Pests e.g. termites, white grub/ diseases e.g. ratoon stunting and smut attack the crop and lowers the yields lowering /farmers income.**
* **Prolonged drought often destroys the crops leading to low yields**
* **Poor feeder road in some areas leads to delay in delivery of the cane to the factory lowering the quality / profit to the farmers**
* **High cost of farm inputs reduces the farmers profit margins**
* **Accidental fire/ fire set by arsonists destroy the cane resulting in heavy loses to the farmers**
* **Delay in harvesting reduces the quality / tonnage of the cane reducing the farmers earnings**
* **Flooding of the market by cheap imported sugar causes unfair competition thus lowering demand for locally produced sugar and payment to farmers**
* **Closures of some factories has deprived farmers of their sources of income**
* **Mismanagement of industries leads to low and delayed payments discouraging the farmers**
* **Low / delayed payments demoralizes the farmers**

c (i) Give three by-products from sugarcane (3mks)

* **Bagasse**
* **Molasses**
* **Jaggery**
* **Filter cake/ mud**
* **Cane juice**

ii.) Give three uses of sugar (3mks)

* **As a sweetener**
* **It is used in baking/ confectionary**
* **Used in soft drinks**
* **Used to make sweets/ ice cream**
* **Is used in production of drugs**

8 a i.) State two farming methods that assists in soil rehabilitation (2mks)

* **Soil terracing**
* **Ploughing along the contour**
* **Controlling / Regulating grazing**
* **Planting cover crops**
* **Mixed cropping**
* **Crop rotation**
* **Adding manure/fertilizers**
* **Mulching**
* **Agroforestry**

ii.) Give two methods that are used to drain swamps in Kenya (2mks)

* **Constructing drainage pipes**
* **Digging open ditches / canals**
* **Pumping out the water**

b(i) Name two river that supply water to Mwea Tebere irrigation scheme (2mks)

* **Thika**
* **Nyamindi**
* **Murubara**

ii.) Give the method of irrigation used in Mwea Tebere irrigation scheme (1mks)

* **Basin / flood**

c) Explain how the following factors influenced the establishment of Mwea Tebere irrigation scheme

* Soil (2mks)
* **Presence of black cotton soil which is suitable for cultivation of rice/ retains water for along time**
* Government policy (2mks)
* **There was need to keep political detainees busy this made the colonial government to set up the scheme where there was large detention camp**

d (i) Describe the process of land reclamation in Mwea Tebere irrigation scheme (4mks)

* **Canals are constructed to direct water from rivers Thiba/Nyamindi/Murubara**
* **The land is divided in rectangular portions surrounded by ridges/ bunds**
* **Water is directed into canals then into the paddy fields**
* **The plots is are ploughed/rotavated**
* **The plants remained are buried in the mud to facilitate their decomposition**
* **Leveling of the fields is done ready for planting**

ii.) State four characteristics of three the polders of Netherlands (4mks)

* **The soils are highly desalinated**
* **They are protected by the dykes against gales/sea encroachments**
* **They are surrounded by ring canals to facilitate drainage**
* **They are divided into specific land use activities/rectangular portions**
* **The land is intensively utilized**
* **Horticulture is the predominant agricultural activity**
* **The largely lie below sea level**
* **They are large in size/area/ a crease**
* **They are gently sloping**

e.) Your class intend to carry out a field study in Mwea Tebere irrigation scheme

i) Name two crops that you are likely to identify in the scheme (2mks)

* **Rice**
* **Beans**
* **Maize**
* **Tomatoes**
* **Vegetables**

ii.) State two reasons for the need of sampling the area of the study (2mks)

* **To reduce the cost of study**
* **To minimize biasness during the study**
* **To save time during the study**
* **Enables detailed study**

iii.) Give two after study activities you are likely to engage in (2mks)

* **Displaying the photographs taken during the field study**
* **Writing a report about the study**
* **Discussing the findings in groups**
* **Reading further on the topic of study**
* **Analyzing the data collected**
* **Presenting the findings**

9 (a)(i) What is industrialization? (2mks)

* **Is the process and pace a country sets to establish industries**

ii) Name a town in Kenya where each one of the following industries is located

 oil refining (1mk)

* **Mombasa**

 Paper manufacturing (1mk)

* **Webuye**

 Motor vehicle assembly (1mk)

* **Nairobi, Mombasa,Thika**

 Textile industry (1mk)

* **Thika, Nairobi,Mombasa,Eldoret,Kisumu,Nakuru, kitui**

b i) Give five reasons why the development of Jua kali industry is encouraged in Kenya (5mks)

* **Mainly produces for local market thus saving foreign exchange**
* **It produces relatively cheap products that are affordable to many improving living standards**
* **It facilitates decentralization of industries thus curbing rural-urban migration**
* **It uses locally available/scrap metals/ recycled raw materials thus reducing cost of imports/conservers environment**
* **Has promoted development of technical skills/innovations useful in other sectors of the economy**
* **It creates employment raising living standards**
* **It requires less capital to establish**

ii.) Explain four factors that led to the development of iron and steel industry in the Ruhr region of Germany

 (8 mks)

* **Presences of navigable rivers e.g. Rhine/canals which provide cheap transport for bulky raw materials and finished products**
* **Availability of raw materials iron ore /limestone/coal from the rhine valley for use in the industries**
* **Presences of coal in rhine valley / imported petroleum which provided power**
* **Availability of water from River Rhine//Lippe for various industries uses**
* **The dense and affluent population in Germany/ Europe provided a large and ready large market for iron and steel**
* **Highly skilled labour from within the region to work in industries**
* **Availability of capital from rich families/merchants for stabilizing industries**

c.) Explain three causes of the decline in the textile industry in Kenya (6mks)

* **Large scale importation of second hand clothes has reduced demand for locally produced textile/ second hand clothes are cheaper than locally produced new textile**
* **These has been declined in the production of cotton which has led to limited supply of raw materials for the textile industry**
* **Liberalization of the economy has encouraged business people to import textile from other countries instead of selling locally provided ones**
* **Mismanagement of textile factories has led to closure of some industries**
* **Belief that imported garments are superior to locally produced once has reduced demand for local garments**
* **Decline in the economy has discouraged investors who would set up textile industries in Kenya**

10. (a) Give three reasons why road transport is better developed than air transport is east Africa (3mks)

* **Most vehicles are cheaper to buy and maintain than air crafts**
* **Roads transport is more flexible than air transport**
* **Construction of roads is cheaper than that of airports**
* **Fare / freight charges on roads are lower than that of air transport**
* **Motor vehicles require less skills to operate than aircraft**

ii.) Name two international airport in Kenya (3mks)

* **Jomo Kenyatta international airport / Nairobi**
* **Isiolo international airport**
* **Kisumu international airport**
* **Eldoret international airport**
* **Moi international airport /Mombasa**

b.) Explain four factors that have hindered the development of river transport in Africa (8mks)

* **Many river passes through different climatic regions causing fluctuations in river water**
* **Presences of rapids/waterfalls which hinders navigation**
* **\Many rivers are short or shallow making it difficult for movement of water vessels**
* **Presence of floating vegetation/sudd hinders navigation**
* **Silting at river mouths hinder port development**
* **Many rivers pass across political boundaries which hinder river transport development**
* **Low levels of technology hinder process of developing rivers transport**

c.) The diagram below shows the great lakes St Laurence seaway. Use it to answer question C, ii) and (iii)

Name

i.) the part marked N and P (2mks)

* **N – Quebec**
* **P - Chicago**

ii.) the lake marked L (2mks)

* **Superior**

**iii,)** Waterfall marked M

**M- Niagara**

iii.) Explain the benefit of the Great lakes St. Laurence’s seaway to the economies of Canada and USA (8mks)

* **Dams/reservoirs found along the route provide HEP for domestic/ industrial use**
* **The sea way /Niagara fall attract tourists who bring in foreign exchange used to develop other sector of the economy**
* **Has created employment opportunities in the transport sector of the economy raising the standard of living of the people in the area**
* **Provide cheap means of transport for both imports and export thus encouraging trade**
* **It has led to the growth of towns/ ports which have become focal points for economic activities**
* **There has been extensive industrial development in the area / growth of Pittsburg industrial conurbation due to accessibility to the raw materials**
* **The countries earn revenue from tariffs charged on ships which is used to develop other sectors of the economy**