

312/2

GEOGRAPHY

PAPER 2

FORM 3 END OF TERM 3 2026

MARKING SCHEME

1.

a) Ways in which minerals occur

(2mks)

- Beds and seams
- Weathered product
- Alluvial placer deposits
- Veins and lodes

b) Panning method

Involve digging out the sand / gravel which contains minerals particles and mixed with water from the river in a shallow pan. The mixture is then whirled such that the lighter particles of sand / gravel are pushed on the sides of the pan while heavier minerals particles are at the bottom of the pan which are easily removed by hand as the wanted mineral.

(3MKS)

2.

a) Fresian, ayrshire Guernsey

(2 MKS)

b)

- Cattle kept indoors in winter and autumn
- Cattle fed on fodder
- Dairy farming is spread all over the country
- Dairy products produced mainly for export
- Dairy farming is highly mechanized
- Dairy farming is highly specialized
- Dairy cooperatives are well developed
- Artificial insemination (A.I)
- Services are widely used

(3 MKS)

3. Problems that affect forestry in Canada

(5mks)

- Severe winters making tree seedling to take long to mature / lead to delays in harvesting
- Rugged landscape in Northern Canada hinder exploitation
- Winter snow fall hinder exploitation due to inaccessibility
- Wild fires pests and diseases destroy large tracts of land reducing forest cover.
- Over exploitation of trees causing shortage of species / which take long to mature after replanting

4.

a) Agriculture

(2mks)

The art/ science of planting crops and rearing livestock

b) Characteristics of plantation

(3mks)

- Crops usually raised on large estates over 40 ha.
- Most of the large estates owned by foreigners
- Establishment and maintenance of states
- Require large sums of money

5.

a) Livestock ranching counties in Kenya

(2mks)

- Narok
- Kajiado

b) Food products from animals

(3mks)

- Meat
- Blood
- Milk

6.

a)

i)

Other methods

(2mks)

- Simple Bargraph
- Pie Chart
- Any other relevant method

ii)

Working / calculations

Land use	Area in (000) km ²	Length of portions
Settlement	110	5.5
Grass	30	1.5
Horticulture	50	2.5
Forest	10	0.5
Total	200	10

Settlements

$$\frac{110}{200} \times 10 = 5.5 \text{ cm}$$

grass

$$\frac{30}{200} \times 10 = 1.5 \text{ cm}$$

Horticulture

$$\frac{50}{200} \times 10 = 2.5 \text{ cm}$$

Forest

$$\frac{10}{200} \times 10 = 0.5 \text{ cm}$$

A DIVIDED RECTANGLES SHOWING LAND USE IN NAIROBI IN 2003



NB: Working = 2mks

Diagram = 4mks

- iii) Characteristics of horticultural farming in Kenya (5MKS)
- Capital intensive
 - Scientifically oriented activity
 - Intensive land use to maximum yields
 - Mainly done near urban areas because most goods are perishable
 - Export oriented (mainly)

b)

- i) Towns in Netherlands that provide market for horticultural produce. (2MKS)
- Hague - Utrecht
 - Rottardam - Amsterdam
 - Arnham - Overijssel

- ii) International airports in Kenya that receive horticultural goods (2mks)
- Jomo Kenyatta International Airports- Nairobi
 - Moi International Airport- Mombasa

- c) Differences between horticultural farming in Kenya and Netherlands (8mks)
- Farmers in Netherlands have more access to capital while those in Kenya have inadequate access to capital
 - Farmers in Netherlands are highly skilled in horticultural production than those in Kenya
 - More advanced horticultural farming in Netherlands than in Kenya
 - Marketing procedures in Netherlands are more well organized with cooperatives and auction marts as opposed to Kenya (brokers are dominant)
 - More advanced technology in Netherlands has enhanced horticultural farming than in Kenya
 - Netherlands unlike Kenya has well developed means of transport which enhance faster movement of horticultural products than Kenya
 - Max 4 points well explained 4x2=8 mks

7.

a)

i) Forestry

Science of developing or cultivating forests (2mks)

iii) Tropical hardwood trees in Kenya (4 MKS)

- Meru oak
- Mahogany
- Elgon Olive
- Ebony
- Camphor

b) Reasons why agro- forestry is being encouraged in Kenya

- Land is maximumly used
- Trees provide shade to crops/ Wind breaks
- Manure from livestock is used to enrich soil
- Increase food production due to manure/ humans application
- Wood fuel is available for cooking
- Some livestock feed on tree leaves hence there is interdependence
- Soil erosion is controlled since there is adequate plant cover on the ground/ surface of the earth
- Source of fresh air from trees

- Pollination is very efficient since pollinating agents eg wing, bees and other insects are available

(Any 5x1=5mks)

c) Problems facing forestry in Kenya.

- Increased demand for farming and settlement land- Clearing of forests
- High Demand for timber, paper industries, etc leading to massive cutting of trees to meet the demand
- Illegal logging of trees by unlicensed people for charcoal and other timber products. Especially on gazette forest reserves
- Forest fires, caused by hunters and honey harvesters. If not checked can consume large tracts of forest
- Biological conflicts- Huge animals such as elephants trample and cause a lot of trees to trees.
- Drugs growing – scattered portions of forests have been illegally cleared to give room for growing drugs eg Bhang – Mt Kenya forest
- Pests and diseases eg aphids
- Prolonged drought- Failure of rainfall in many areas has led to shrinking of forests and retarded rate of regeneration of forests cover.
- Degazettement of state forests- in 2002, several thousand hectares of state forests were degazetted hence reducing the total acreage of forest cover- Kenya

Any 2x3=6mks

d) Measures Kenyan government has put in place to conserve forest (8mks)

- Carrying out public campaigns through Media, posters, radios, etc urging people to plant trees
- Researching on suitability of soils and the effects on pests and diseases on forests
- Establishment of training institution eg KEFRI at muguga, to train people on forest preservation
- Reduction of wastage in forestry industry through recycling wastes to produce useful products
- Improvement on cutting practices through rational falling of trees
- Alternative sources of fuel- Avoid over-reliance on wood fuel
- Forest guards and forest officers guard forests against destructions
- Enactment of laws to govern forest management
- Non governmental organizations eg Green Belt Movement, UNEP, have been actively involved in management of forests
- Agro – forestry encouraged
- Afforestation programmes put in place
- Creation of forest reserves eg Mt. Kenya, Arabuku Sokoke, etc

(Any 4x1) (8mks)

8.

a) What is mixed farming (2mks)

Type of agriculture involving growing of crops and rearing of livestock on the same piece of land / farm on rational basis

b) Three Economic factors influencing Agriculture

- Operational costs- of growing and rearing animals
- Marketing expenditure of the product to the market
- Price of actualization of agricultural commodities

(3mks)

- c)
- i) Give four physical factors influencing coffee farming in Kenya.
- Temperature between 14-26⁰c/ warm
 - High rainfall well distributed in a year 100-2050mm p.a
 - Volcanic soils, deep and well drained
 - High altitude (910-2000 m a.s.i)
 - Undulating landscape/ gentle slopes
- Any 4x1 (4mks)
- ii) Describe coffee production I Kenya from harvesting to marketing. (8mks)
- Manual picking of red ripe berries
 - Transportation of berries to the collection centers
 - Sorting of berries to remove the wrong ones
 - Weighing
 - Loading of berries in large tanks having water to remove outer covering pulp exposing 2 white beans
 - Fermentation of beans, then washing and sun-drying them
 - Sorting of beans according to size and quality
 - Husks are removed
 - Packaging of the final seed ready for export
- 8x1 (Any

NB Must be procedural points

- iii) Give three differences between coffee farming in Kenya and Brazil
- In Kenya coffee farming face climate problems of heavy rainfall and prolonged drought while in Brazil farmers face the problem of forest
 - In Kenya land ownership is mainly individual while in Brazil there is more extensive land called Fazendas suitable for coffee growing
 - In Kenya, transportation of coffee berries from farms to factories is mainly by road which are inadequate while in Brazil transport of coffee is mainly well developed and adequate roads and railway network from farms to the factories
- 3x2 (6mks)

- d) You intend to carry out field study on coffee growing in a farm near your school. State two advantages of using secondary data during data collection.
- Easy to obtain data which has been analysed
- Cheapest/ less expensive
- Saves time (2mks)

9. Use the map of Africa below to answer questions

(a) W- Fluorspar

W-Gold

Y-Diamond

Z-Copper

(4mks)

(b)

- i)
- Underground/ shaft/ adit/ solution
 - Alluvial/ placer/ dredging/ hydrosulic
 - Opencast/ strip

(2mks)

ii)

- Mombasa
- Dar es salaam

(c)

- Mode of occurrence
- Economic value of mineral/ quality of the ore/ cost of mining
- Level of technology
- Availability of transport facilities
- Government policy/ political influences
- Availability of market

(5mks)

(d)

- Exported- earn foreign exchange- Kenya
- Employment opportunities- earn a living
- Raw materials to other industries eg glass making industrialization
- Development of social amenities in the area eg Schools, hospitals
- Growth of Magadi Town, opening business opportunities
- Growth of local and foreign tourism revenue to government
- Revenue to government through taxing

e)

- Planting trees
- Creating parks to attract tourists
- Refilling of the holes
- Landscaping for settlement of farming
- Introducing aquaculture

10.

a)

i)

Extensive grazing of livestock on natural pasture involving constant or seasonal migration of nomads and their livestock in search of water and pasture

(2mks)

ii)

- For dowry payment
- For prestige/ social status and wealth
- As an insurance against natural death when some die, others remain
- Source of food eg Milk, Meat, hides skins, blood

b)

i)

- Constant or seasonal migration of nomads and livestock in search of water and pasture
- Large herds of cattle are kept/ insist on quality
- Wide varieties of animals kept eg goats, sheep, camels, horses, cattle, goats, sheep, camels, horses, cattle
- Rely on natural grass/ vegetation for their pasture- mainly grass for it takes place in areas of low and seasonal rainfall
- Nomads lead simple lifestyle in temporary dwellings (rely on milk, blood meat)
- Land tenure is communal leading to overgrazing.

c)

- Creation of full ministry to deal with livestock development

- Sinking boreholes and dams to ensure supply of water during dry seasons
- Encourage growth of fodder crops, drought resistant crops and more nourishing grasses
- Government to give funds for research in controlling and managing animal diseases
- Dipping facilities to eradicate ticks or tick- borne diseases/ spraying/ bushes to eradicate tsetse flies
- Provide field officers to train farmers to adopt modern methods of rearing and breeding livestock

3x2

(6mks)

d)

i)

- Show direction to be followed during fields study
- Assist in estimating time required for the study
- Help decide on techniques of data collection
- Help estimate the distance to be covered
- Help in drawing a working schedule

4x1

(4mks)

ii)

- Common cattle diseases and pests
- Inadequate pastures for animals
- Inadequate water in the area

(2mks)

