BUKAKA CLUSTER EXAMINATIONS
GEOGRAPHY PP2
MARKING SCHEME
END OF TERM1, 2025
FORM 4

<u>SECTION A (25 MARKS)</u>
Answer all questions in this Section

1.   (a) Outline three divisions of human and economic geography.   (3mks)
      - Historical geography.
      - Cultural geography.
      - Population geography/ demography.
      - Political geography.
      - Social geography.
      - Settlement geography.
      - Economic geography.

      (b) State two ways in which geography relates to agriculture.   (2mks)
      - Geography deals with the study of climate/weather which influences agricultural activities.
      - Geography studies relief which influences various agricultural activities.
      - Geography explains various agricultural systems and their distribution.
      - Geography studies types of soils which influence types of crops.

2.   (a) List two climatic factors that influence agriculture.   (2mks)
      - Rainfall.
      - Sunshine.
      - Wind.
      - Temperature.

      (b) State characteristics of shifting cultivation.   (3mks)
      - Vegetation is cleared by slashing and burning.
      - There is the use of little or no manure.
      - The land is communally owned.
      - The land is abandoned when the yields decline.
      - Both settlements and plots are temporary.
      - Farming depends mainly on family labour.
      - Simple implements are used.
      - Mainly done for subsistence.
      - Plots are small and scattered.
      - Virgin land is sited in the forest and cultivated.

3. (a) Differentiate between fishing and fisheries. (2mks)
    - Fishing is the exploitation of water resources/ aquatic animals like fish while
      fisheries are the water bodies that contain fish and other related resources.

    (b) Name three species of fish reared in fish ponds. (3mks)
     - Tilapia.
    - Mudfish.
    - Trout.
    - Dagaa.
    - Carps.
    - Prawn.
    - Oyster

4. a) Name three coffee species grown in Kenya.   (3 marks)
    -Arabica
    - Robustu
    -Ruiru II

    b) State two problems experienced in the marketing of coffee in Kenya.   (2 marks)
    - Competition from other coffee-producing countries in the world market reducing quota for Kenya
    -delayed payments to farmers which has lowered their morale
    -impassable roads during rainy seasons delay delivery of coffee berries to factories lowering their quality leading to losses to farmers
    -competition from other beverages lowers the market/demand for coffee
    -fluctuation of coffee prices in the world market making farmers unable to plan ahead hence low profit margin

5. (a) Identify two ways in which minerals occur.   (2mks)
    - Some occur as veins and lodes.
    - Some occur as beds and seams.
    - Some occur as alluvial deposits.
    - Some occur as weathering products.
    - Some occur as evaporates.
    - Some occur in pools.

    (b) Describe stripping as a type of open cast mining.   (3mks)
    - The unwanted material/ overburden is removed.
    - Soft mineral is scooped out.
    - Hard ore is blasted using explosives.
    - The mineral is then scooped.
    - The mineral is loaded onto lorries.
    - The mineral is transported to the factory for processing.

Answer question 6 and any other two questions from this Section

6. Study the photograph below and use it to answer the questions that follow.

(a) i. Name the activity shown in the above photograph.   (1mk)
  - Sugarcane harvesting.

   ii. Name two counties in Kenya where the above crop is grown on a large scale. (3mks)
  - Migori.
  - Kisumu.
  - Siaya.
  - Bungoma.
  - Homa Bay.
  - Narok.
  - Kisii.

(b) State three physical factors that favour the growth of the above crop in Kenya.   (3mks)
  - High rainfall, well distributed throughout the growing period.
  - Moderate to high temperatures.
  - Deep, well-drained loamy/black cotton/ clay soils.
  - Dry/ sunny spell during harvesting.
  - Gently sloping/undulating land.

(c) i. Describe cultivation of the above from land preparation to harvesting.   (6mks)
  - The land is cleared.
  - The land is ploughed.
  - Furrows are dug.

- Seed cane are planted in the furrows.
- Top dressing is done.
- Weeding is done regularly.
- Gaping is done at the initial stages.
- Spraying is done using herbicides.
- The cane is harvested using pangas.

   ii. Explain four ways in which sugarcane growing contributes to Kenya's economy.
   (8mks)

- Some sugar is exported to earn foreign exchange for developing other sectors of the economy.
- Earns income from sale of sugar raising living standards.
- Creates employment in the farms/ related industries raising living standards.
- Promotes development of related industries by providing raw materials.
- Promotes development of feeder roads to ease movement of sugarcane/ sugar.
- Earns revenue from taxes on sugar which used to develop other sectors of the economy.
- Promotes development of towns by attracting settlements.
- Promotes development of social amenities in the sugar growing areas hence raising living standards.
- Saves on foreign exchange by limiting importation of sugar which is used to develop other sectors of the economy.

(d) i. State three problems facing sugar growing in Kenya. (3mks)
  - Pests such as termites destroy sugarcane/ lowering yields.
  - Diseases such as ratoon stunting which destroys the crop.
  - Frequent fire outbreaks which destroy sugarcane.
  - Climatic hazards/ drought which destroys sugarcane.
  - Fluctuation of world market prices which leads uncertainty/ difficulty in planning.
  - Impassable roads which delay sugarcane transportation.
  - High cost of farm inputs which lowers profit margins.
  - Delayed payments which lower farmers' morale.
  - Mismanagement of cooperatives which leads to their collapse/ losses.
  - Labour shortage during harvesting raising production costs.
  - Delayed harvesting of sugarcane lowering farmers' morale.

   ii. Outline two uses of the main product of sugarcane. (2mks)
  - Brown sugar is used in baking bread/ cakes.
  - Sugar is used in sweetening foods/ drinks.
  - Sugar is used in making local brews.
  - White sugar is used in making sweets/ chocolates.
  - Sugar is used to manufacture drugs.

7. (a) i. Define the term land rehabilitation. (2mks)
   - Land rehabilitation is restoration of land to its former useful state.

ii. State three ways in which land has been reclaimed in Kenya. (3mks)
- Draining of swamps in flood-prone areas.
- Irrigating dry land.
- Application of manure.
- Rehabilitation of eroded landscape.
- Filling-up of quarries.
- Control of pests.
- Afforestation and re-afforestation.
- Agroforestry.
- Planting of drought-resistant crops.
- Control of floods.

(b) Explain four physical factors that influenced the location of the Pekerra irrigation scheme. (8mks)
- Availability of water from River Perkerra for irrigation.
- Gently sloping/ undulating land that allows water to flow by gravity/ mechanization.
- Clay/ loamy soils for growth of a variety of crops.
- Availability of larges of land for irrigation.
- Dry/ semi - arid conditions/ low rainfall which necessitates irrigation.

(c) State how the following problems facing Mwea irrigation scheme can be solved:
   i.   Fluctuating water levels. (1mk)
- Continuous dredging/ deepening of canals.
- Construction of dams to store water for use during dry seasons.
- Government to enforce laws on proper land use in the catchment areas of the rivers.
   ii.   Attack by diseases. (1mk)
- Using clean seeds.
- Spraying with relevant chemicals.
   iii.   Shortage of labour. (1mk)
- Improved marketing to help farmers earn more money to meet their expenses.
   iv.   Impassable roads. (1mk)
- Government to improve the existing roads/ construct new roads.

(d) Describe the stages followed in the creation of polders in the Netherlands. (8mks)
- Protective dykes/ sea walls are constructed to enclose the part to be reclaimed.
- Ring canals are constructed on the interior to carry away excess water.
- Pumping stations are installed to pump water from an enclosed area.
- Water is pumped out of the area enclosed by the dyke.
- Reeds are planted to drain excess water and use up the excess salt.
- Drainage ditches and more pumping stations are put on the land being reclaimed.
- Drainage pipes are laid below the soil.
- Inner dykes and ring canals are used to divide area into regular portions.
- Soils are treated with chemicals to lower salinity.

- The drained land is flushed with fresh water to remove salt from the soil.
- Water is pumped from the polders regularly to avoid its accumulation.

8. (a) i. Name three exotic breeds of dairy cattle reared in Kenya. (3mks)
   - Friesian/ holstein.
   - Guernsey.
   - Jersey.
   - Ayrshire.
   - Alderney
   - Sahiwal.

   ii. Name three counties in the Rift Valley region of Kenya where dairy farming is
       carried out on large scale. (3mks)
   - Nakuru.
   - Uasin Gishu.
   - Laikipia.
   - Kericho.
   - Trans Nzoia.

   iii. State three human factors that favour dairy farming in Rift Valley. (3mks)
   - Availability of labour from the high population.
   - Presence of milk processing factories in the region.
   - Well developed transport network in the region.
   - Presence of milk cooperatives in the region.
   - Availability of extension/ veterinary services for the farmers.

(b) Explain four ways in which the Government of Kenya assists Dairy farmers. (8mks)
   - Appointing supervisisory boards to run the cooperatives.
   - Extending credit facilities to farmers through cooperatives.
   - Holding agricultural shows to educate farmers on better dairy management.
   - Setting up demonstration farms which breed high quality bulls for farmers.
   - Establishing well maintained roads for easy delivery of milk.
   - Carrying out extensive research on possible solutions to animal diseases.

(c) Explain four reasons why dairy farming is more developed in Denmark than Kenya.
                                                                                   (8mks)
   - In Denmark dairy farming is highly mechanised hence more milk while in in Kenya it is less
     mechanised hence less milk.
   - In Denmark dairy farming less affected by variation in climate while in Kenya it is more
     affected by variation in climate.
   - In Denamrk dairy animals feed fooder/ commercial feeds while in Kenya they feed on
     natural grass.

- In Denmark dairy products are mainly exported while in Kenya they are mainly consumed locally.
- In Denmark dairy farming is highly specialised while in Kenya most farmers practised mixed farming.
- In Denmark artificial extensional services/ insemination is widely used while in Kenya it is limited.
- In Denmark there is intensive research on better ways of carrying out the practice while in Kenya the research is limited.
- In Denmark dairy farming is practised throughout the country while in Kenya it is restricted to highlands.
- In Denmark dairy cooperatives are more developed while in Kenya they are leased developed.

9. (a) List three ways in which minerals occur. (3 marks)
    - Lodes and veins
    - Beds and seams
    - Weathering/ leaching products
    - Alluvial/ placer deposists

    (b)Describe the following methods of mining.

    (i)   Shaft mining. (6 marks)
    - shafts are dug vertically into the earth's crust
    -horizontal tunnels are dug to reach the mineral ore
    - props made of hardwood are erected to support the roof of the tunnel
    - light rail trucks are constructed to transport the mineral
    -the mineral is blasted/ dug/ drilled and loaded onto cages which lift the to the surface
    (ii)   Open Cast (4 marks)
    -the overlying soils/ rocks are removed
    -the ore is then reached
    -the rocks containing the mineral are then dug or blasted
    -the minerals are then loaded onto lorries/ trucks/ trains and transported for processing

    (c) Explain six problems facing the mining industry in Kenya.
    (12 marks)
    -inadequate capital to invest in the industry/modernize/expand/explore
    -some mineral deposits are found in small quantities
    -Kenya lacks modern skills/technology hence slowing the mining process
    -price fluctuation of minerals in the world market leading to uncertainty

-extraction has been affected by inadequate power supply

-some minerals are found in areas which are not easily accessible and hence expensive to transport

10. (a) (i) What is a forest? (2 marks)

-it is the continuous growth of trees covering a large track of land

(ii) Name any three species found in the coniferous forests. (3 marks)

-pines

-spruce

-forg

(iii) State four characteristics of coniferous forests. (4 marks)

-trees are light

-trees are evergreen

-trees occur in pure strands

-trees are tall

-trees have thick barks

-trees have needle like leaves

-trees take long to mature

-trees are conical in shape

-Tree roots grow shallowly

-forests have little/ no undergrowth

(b) Explain four physical conditions which favour the growth of forests in the Kenya Highlands. (8 marks)

-volcanic soils encourage luxuriant growth

-high rainfall which ensures continuous growth

-moderate temperatures encourage the growth of many species/ luxuriant growth

-deep soils encourage penetration of roots and strong anchorage

-steep soils discourage human activities thus allowing forests to grow/ thrive

(c) Explain four roles of the government in the management of forests in Kenya. (8 marks)

-carrying out public campaigns to win the support of citizens on management

-funding research on the suitability of soil/pests/disease control

-establishing training institutions that deal forestry to help in management

-encouraging recycling of waste products to reduce cutting of trees

-encouraging use of alternative sources of energy to reduce overdependence on wood fuel

-employing forest guards to check on destruction of forests

-Enforcing laws against destruction of forests

-encouraging agroforestry/afforestation/ reafforestation programs to provide wood fuel