

## FORM FOUR GEOGRAPHY

### MARKING SCHEME

- 1 (a) Give three economic factors that affect agriculture (3marks)
- *operation cost*
  - *Marketing expenses*
  - *Price fluctuations*
- (b) State three physical factors that favour coffee farming in Brazil (3 marks)
- *South east Brazil receives moderate to high temperature between 14<sup>o</sup>c and 26<sup>o</sup>c which favours coffee growing.*
  - *The Brazilian plateau receives high annual rainfall of about 1500m which supports coffee growing.*
  - *The Brazilian plateau raises between 300 and 915 m but receive high rainfall.*
  - *South east Brazil has deep well drained Terra Rosa soil which is rich in potash and humus.*
  - *Occurrence of a dry season between May and September which allows ripening and harvesting of coffee.*
  - *Occurrence of gently sloping land /undulating land within the Brazilian plateau.*
- (c) Explain four differences between coffee farming Kenya and coffee farming in Brazil
- *In Kenya, most of the coffee is grown by small scale farmers whereas in brazil ,most of the coffee is produced in large estates called fazendas*
  - *In Kenya the main climatic hazard affecting coffee trees is drought while in Brazil, the main climatic hazard is frost.*
  - *In Kenya, small scale coffee farmers market their coffee through co-operatives while in Brazil, marketing is done by companies.*

- *In Kenya, coffee yield per hectare is high while in Brazil coffee yield per hectare is low to soil exhaustion.*
- *In Kenya, coffee is mainly grown in the highlands while in Brazil, coffee is grown in the plateau.*
- *d. it is practiced in the mountains of*

*i)Norway*

*ii)Italy*

*iii)Switzerland*

*iv)Britain*

*v)U.S.A*

2.

- a. What are choropleth maps? (2marks)
- *A choropleth map is a statistical map which shows the relationship between a given quantity of items and a given area of land.*
- a. State three disadvantages of using dot maps to present statistical data (3marks)
- *Drawing dot maps is tedious if large areas are to be covered*
  - *It is difficult to draw as all dots have to be uniform in shape and size*
  - *Small area with dense population may cause dots to merge/overlap*
  - *Even distribution of dots gives a false impression of even distribution of population in an area.*

- *The numbers represented by a dot are not the same numbers that would be found at the exact place within the area.*

3. (a) Differentiate between land reclamation and land rehabilitation (2marks)

- *Land reclamation is the process of converting a waste land into a useful land for agriculture and settlement whereas land rehabilitation the process of restoring a waste land to its former productive state*

(b) Outline four methods used in land rehabilitation (4marks)

- *Afforestation and reforestation*
- *Planting cover crops and grass strips*
- *Practicing bush following*
- *Practicing mulching*
- *Building bunds and gabions across slopes*
- *Adding plant and animal manure*
- *Treating acidic soils by adding lime.*
- *Construction of dams and wiers to control floods*
- *Practicing controlled grazing*

(c) State four objectives of reclaiming parts of Yala-Bunyala (4 marks)

- *To free the area insect pests*
- *To provide land for settlement and agriculture*
- *To reduce flooding and its associated hazards*
- *To develop the remote area*

4.

a. Name two rivers that provide irrigation water for Mwea -Tebere Irrigation Scheme

- *River Thiba*
- *River Nyamindi*
- *River Murubara*

(2marks)

- b. List three blocks that form Mwea Irrigation Scheme (3 marks)
- *Mwea*
  - *Tebere*
  - *Karaba*
  - *Wamumu*
  - *Thiba*
- c. Explain four physical problems facing irrigation farming in Kenya (3marks)
- *Hot and moist conditions promote the breeding of various pests which attack irrigated crops thus leading to low yields*
  - *Fluctuations in the volume of river water during the dry seasons reduces the capacity to irrigate hence under –utilization*
  - *Situation of canals supplying irrigation water interrupts flow of water to farms as dredging is expensive.*
  - *Flooding of fields during basin irrigation may result in leaching of nutrients and soil erosion hence low yields.*
  - *Outbreak of crop diseases due to hot humid conditions at times destroys crops leading to losses.*
  - *Excess amount of water in the fields may ruin crops if the field are too flooded*
- d. Explain four benefits of the zuyder zee project in the motherlands (8marks)
- *Creation of fresh water are called lake Ijssel which provides water for irrigation, domestic and industrial use.*
  - *Sea walls helped prevent flooding of water in low lying areas during strong tides.*
  - *The project increased arable land for agriculture thus boasting food production.*
  - *Road connection between northern Holland and Friesland Island was shortened and improved.*
  - *The sea walls and ring canals are key tourist attraction features for people from all over the world.*