

1. a) What is Forestry? (2mks)

- Is the science of planting, caring and using trees and their associated resources.

b) Name five exotic species of trees planted in Kenya (5mks)

Pine	Wattle	Silky oats
Cypress	Kei apple	Mango
Blue gum/Eucalyptus	Jacaranda	Cuarina
Gravillie	Cinder	

2. State four factors favouring the growth of forests on Mt. Kenya (4mks)

- High rainfall 1000-2200mm- encourage continuous tree growth
- Deep fertile volcanic soil – roots penetrate deep to support trees
- Area is a gazette reserve allowing growth of trees
- Steep slopes discourage settlement- encourage forestry

3. Give four reasons why afforestation is being encouraged in Kenya (4mks)

- To ensure continuous supply of wood fuel, timber and raw materials for paper industries
- To protect soil erosion
- To protect water catchment areas
- To create employment opportunities
- To promote scenic beauty
- To reduce importation of forests products thus saving foreign exchange

4. What is a polder? (2mks)

- It is a low lying land reclaimed from the sea and enclosed by Dykes in the Netherlands

5. Describe the stages involved in reclamation of a polder (8mks)

- Construction of ring Dykes and canals
- Construction of ditches within each polder which leads water into a pumping station
- Water is pumped out into the canals
- The land is allowed to dry
- The soil is improved through desalinization by flushing in with fresh water, planting of hardy plants and additions of soil.
- The polder land is then divided into economic units
- Infrastructure is laid out and people are settled in villages
- Farming activities then commence

SECTION B**Answer question 6 and any other two questions in this section**

- 6.** The table below shows the number of tourists who visited Kenya from 2010 to 2012. Use it to answer question 6(a)

COUNTRY	NUMBER OF TOURISTS
Canada	90,000
Germany	150,000

Italy	60,000
U.S.A	100,000
France	110,000
TOTAL	510,000

a) i) Apart from pie charts, name two other statistical methods that can be used to represent the data in the table (2mks)

- Dot maps
- Choropleth maps

ii) Using a radius of 5cm, draw a pie chart to represent the data in the table above. Show your calculations (10mks)

Step 1 – Get the total number of tourists

Step 2 – Convert each segment into degrees by dividing each component with total and multiply by 360° e.g.

$$\frac{x}{\text{Total}} \times 360^\circ$$

$$1. \text{ Canada } \frac{90,000}{510,000} \times 360^\circ = 63.52^\circ \simeq 64^\circ$$

$$2. \text{ Germany } \frac{150,000}{510,000} \times 360^\circ = 105.88^\circ \simeq 106^\circ$$

$$3. \text{ Italy } \frac{60,000}{510,000} \times 360^\circ = 42.35^\circ$$

$$4. \text{ U.S.A } \frac{100,000}{510,000} \times 360^\circ = 70.58^\circ \simeq 71^\circ$$

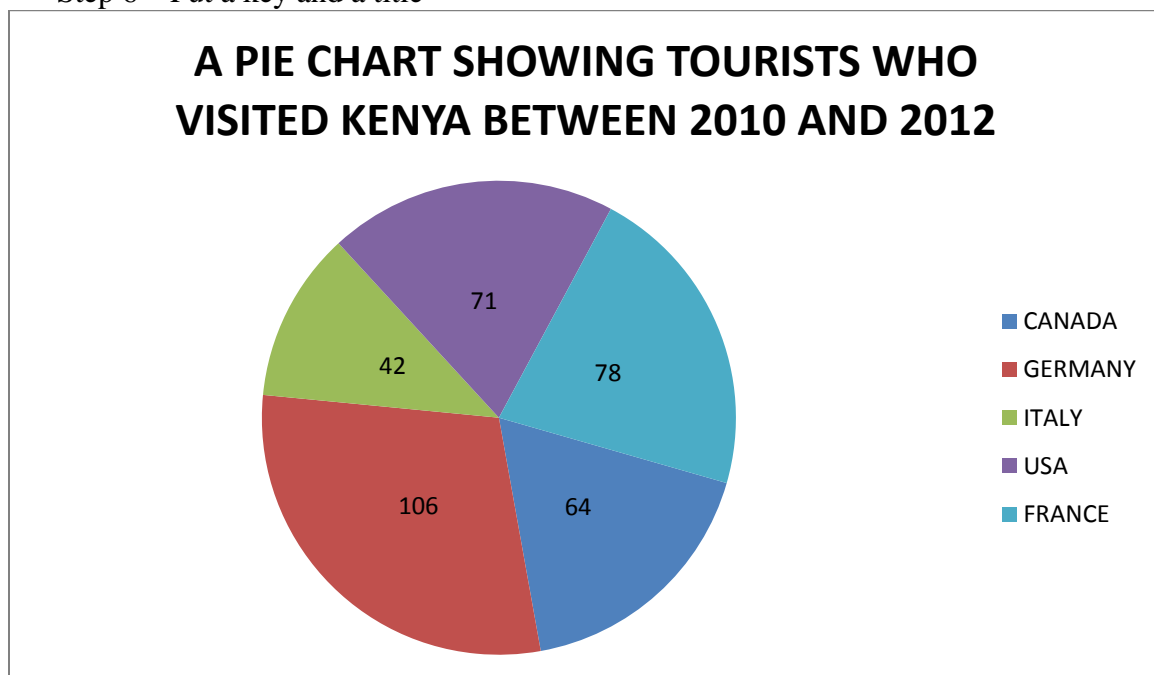
$$5. \text{ France } \frac{110,000}{510,000} \times 360^\circ = 77.64^\circ \simeq 78^\circ$$

Step 3 – Use the scale of 5cm to draw a circle

Step 4 – Draw each of the sectors by measuring each angle from the centre

Step 5 – Shade the sectors and label them

Step 6 – Put a key and a title



b) State the advantage of using the data in a pie chart (3mks)

- A pie chart gives a good visual impression
- Is easy to read and interpret
- Is easy to compare
- Is easy to draw conclusions

c) State five steps taken by Kenyan government to promote wildlife resources (5x2= 10mks)

- Establishment of anti-poaching units to curb poaching
- Encouragement of Ecotourism to reduce wildlife human conflict
- Isolation and treatment of sick animals/veterinary services
- Ban on hunting and trading in game trophy
- Construction of electric fencing in game parks/reserves
- Training institutes to train wildlife personnel

7. a) What do you understand by these terms?

i) Land reclamation (2mks)

- Is the practice by which less useful land is converted into more useful land

ii) Land rehabilitation (2mks)

- Is the process of recovery of land which has been misused and destroyed through human activities

b) State five methods used in land reclamation and rehabilitation in Kenya (5mks)

- Irrigation of dry land
- Draining of swamps
- Filling up of quarries
- Control of pests
- Application of manure
- Rehabilitation of eroded landscape
- Agroforestry
- Control of floods
- Afforestation/Re-afforestation
- Planting of drought resistant crops

d) i) Explain four factors that led to the establishment of Perkerra Irrigation Scheme (4x2=8mks)

- Availability of extensive gentle sloping land which made it possible for irrigation to take place
- Availability of water for irrigation from river Perkerra and its tributary river Suguta
- Deep fertile soils in the valley plains
- Availability of cheap labour and tenant farmers who have settled to farming
- High temperatures favouring the growth of crops
- Accessible Nakuru-Baringo all weather road which makes transport of goods easier to the market
- Low unreliable rainfall necessitated irrigation

ii) Apart from Perkerra, name two other large Irrigation schemes in Kenya (2mks)

- Mwea Tebere irrigation scheme
- Bura irrigation scheme

e) **You intend to carry out a field study on Irrigation farming in Perkerra Irrigation Scheme. Give six reasons why you need a pre-visit or reconnaissance for the study (6mks)**

- To help in designing methods of data collection
- To help in formulating hypothesis/objectives of study
- To help in assembling equipments
- To help estimate the cost
- To seek permission/get contact with relevant authorities
- To help in preparing work schedule
- To determine appropriate routes
- To identify the problems likely to experience

8. a) **Name the major cocoa growing areas in Ghana (3mks)**

- Kumasi
- Takoradi
- Accra

b) **Identify five conditions suitable for the cultivation of cocoa in Ghana (5mks)**

- High rainfall – 1200 – 1500mm per year
- High temperatures throughout the year 25°C – 30°C
- Deep well drained fertile soils
- Shelter from strong sun rays
- High relative humidity 70 -90%
- Plenty of labour force during harvesting

c) **Outline the stages in the processing of cocoa (7mks)**

- Cocoa pods are split open
- Beans removed by hand
- Beans are fermented for a week in heaps and are covered with banana leaves
- Beans are washed after fermenting, cleaned and then sundried
- Beans are cleaned, roasted and husks removed to produce cocoa nuts
- Cocoa nuts are ground into powder and cocoa butter is separated

d) **You intend to carry out a field study in a dairy farm near your school.**

i) **Identify two characteristics of a good hypothesis for the study (2mks)**

- Hypothesis should not be obvious
- Hypothesis should be related to the topic of study

ii) **State four advantages of using the interview method to collect data during the study (4mks)**

- Obtain first hand information from respondents for ambiguous answers
- A lot of information can be obtained
- It promotes good relations with respondents
- It can be used to get information from illiterate people.

iii) Give four problems you are likely to encounter as you collect the data (4mks)

- Language barrier
- Time consuming
- Expensive as it involves a lot of movement
- Unreliable information may be given due to forgetfulness
- Information may be subjective
- Wrong information may be given

9. a) Differentiate between fishing and fisheries (4mks)

- Fishing refers to all the activities involved in harvesting of aquatic life in the seas and inland waters all over the world
- Fisheries refer to all the water resources which form the habitat from which fish is harvested. These include oceans, rivers, ponds, lakes e.t.c

b) Use four methods used to preserve fish (4mks)

- Canning
- Freezing
- Smoking
- Sun drying
- Frying

c) Identify four Traditional methods of catching fish (4mks)

- Harpooning/spearing/arrowing
- Use of woven baskets
- Use of hand lines/single lining
- Use of traps
- Poisoning/Herbs

d) Give four reasons why Norway is a great fishing nation (4x2 =8mks)

- Norway has extensive continental shelf
- Its waters are rich in planktons
- It has a long forded coastline with sheltered waters ideal for fishing/breeding ground for fish
- Cold climate and rugged terrain drive people to fishing
- Long tradition in sailing and fishing by people
- A well developed ship building industry which provide fishing vessels
- Norway has cool climate which makes fish preservation easy

f) Identify five measures the Government of Kenya is undertaking to encourage fish culture (5mks)

- Setting up fish ponds and hatcheries and demonstration farms
- Encourage farmers to set up fish ponds
- Provision of extension officers to advice farmers
- Provision of financial assistance to fish farmers by fish department
- Encourage eating of fish by communities that never eat fish – Governments food policy

10. a) i) What is wildlife? (2mks)

- Wildlife refers to Fauna (animals) and Flora (plants) in their natural habitats

ii) Give five reasons why it is necessary to conserve wildlife in Kenya (5mks)

- To maintain the genetic pool/genetic diversity
- To protect the endangered species of plants/animals
- To preserve wildlife for future generation/posterity
- To ensure sustainable utilization of species
- To attract tourists/ to earn foreign exchange
- To use wildlife for education/research
- To maintain aesthetic for recreation
- To provide material for medicinal extracts

b) Explain four ways in which Human activities are a threat to wildlife (4x2 =8mks)

- Poaching by illegal hunters has reduced the population of wildlife
- Pollution by industrial and domestic refuse has greatly affected marine life
- Soil erosion due to improper farming methods has led to degradation of wildlife habitat
- Cutting down of trees in forests to pave way for settlements and Agriculture sends wildlife away.

c) You intend to carry out a field study of a National park in your local area.

i) Which animals are you likely to see in the National park? (3mks)

Leopards	Wild birds	Chimpanzees
Hyena	Buffaloes	Baboons
Monkeys	Elephants	

ii) State three items you would include in the work schedule (3mks)

- Time for the departure
- Time to spend in the study
- Time for lunch
- Time to end the study

iii) Give four advantages of studying wildlife through fieldwork (4mks)

- It makes learning interesting/it breaks the classroom monotony
- It makes learning real
- It enables one to apply skills learnt
- It enables one to get first hand information
- It enables one to share information
- It enables one to retain the information learned