**312/2**

**GEOGRAPHY**

**PAPER 2**

**2 ¾ HOURS**

**MWAKICAN JOINT EXAMINATION (MJET)**

**FORM FOUR GEOGRAPHY PAPER 2 MARKING SCHEME**

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 Cauarina

Gravillie Cinder

1. **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

1. **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

1. **What is a polder? (2mks)**

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

1. **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**

1. 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 |

1. **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 360o e.g.

x 360o

1. Canada x 360o = 63.52o ~ 64o
2. Germany x 360o = 105.88o ~ 106o
3. Italy x 360o  = 42.35o
4. U.S.A x 360o = 70.58o ~ 71o
5. France x 360o = 77.64o ~ 78o

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

1. **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

1. **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

1. **a) What do you understand by these terms?**
2. **Land reclamation (2mks)**

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

1. **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

1. **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

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

* Mwea Tebere irrigation scheme
* Bura irrigation scheme

1. **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

1. **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 25oC – 30oC
* 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

1. **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.

1. **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

1. **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

1. **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

1. **a) i) What is wildlife? (2mks)**

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

1. **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

1. **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