

## VEGETATION

1. d) (i) Measure distances/estimation of heights of plants

- Collect sample of plants
- Draw sketches/transects
- Record/take notes
- Take photographs of plants/area
- Count plants
- Feeling the leaves
- Conduct interview

(ii) How to identify different types of plants

- By appearance
- Their colour
- By their leave size/patterns/type
- By their age
- By the nature of their bark
- By texture of their leaves
- By their system of the roots
- The type of fruits.

2. a) (i) W- Rainforest

X- Bamboo

Y-Health and moorland

(ii)

- Savanna vegetation consists of trees and grass
- Wetter areas/near forests the vegetation consists of tall trees similar to those found in forests and woodlands
- Wetter areas have tall thick grass.
- Gradually away from the forest, the trees become fewer and shorter
- Grass is shorter in drier areas
- In drier areas the trees are short and more scattered.
- Some trees are deciduous type
- Most trees are umbrella shaped
- Most common trees are acacia and other thorny trees.
- Where the rainfall is lowest grass is tufted and coarse/trees scrub
- There are scattered baobab trees and other drought resistant trees.
- Along river valleys there is riverine vegetation and thick bush.

(iii) Canada-Prairies

Russia- Steppe

Australia-Downs

b)

- Fire- Often large areas of forests are destroyed by fires and take long to recover.
- Diseases and pests attack mainly the planted forests causing many trees to die.
- Human activities/settlements/charcoal burning/logging have destroyed many forest areas.
- Over exploitation leads to depletion of certain tree species such as Meru oak, Campor and Elgon teak. These trees take long to manure.

- Government policy of degazetting of some forests made people free to clear many forested areas.
  - Prolonged drought leads to degeneration of forest some of which take long to recover.
- 3.
- a) Natural vegetation is the plant cover which is growing wildly on its own.
- b)
- The vegetation is adapted to long, hot dry summers.
  - Some plants are evergreen
  - Grasses dry up during summer and germinate during winter.
  - Woody scrub is common in very dry areas.
  - Some plants have small, spiny leaves while others have thick skinned or leathery leaves.
  - Some plants have long roots.
  - Some plants have thick barks
  - Some plants have large and fleshy bulbous roots.
  - Some trees are deciduous.
- 4.
- Campaigns against indiscriminate cutting down of trees/educating people/ reducing overgrazing.
  - Establishment of vegetation/forest reserves
  - Restriction on cutting down of trees
  - Development of energy saving technology to reduce high consumption of wood fuel
  - Use of alternative sources of energy
  - Encouraging the planting of more trees to reduce reliance on existing ones

- Establish Nyayo tea zones to act as buffer zone.
- 5.
- (i) Variation in rainfall
  - (ii) Variation of temperature
  - (iii) Variation of altitude/relief.
  - (iv) Aspect
  - (v) Soil
  - (vi) Human activities

### **Variation of rainfall**

Areas that receive high rainfall are forested while those receiving low rainfall have grassland vegetation.

### **Variation of altitude/relief**

Vegetation varies with height above sea level (e.g. montane in high altitude) as altitude influence climate and soil.

### **Aspect**

Areas on leeward slopes of Mountains have different vegetation from thick growth of vegetation in the windward side because they receive different amounts of sunshine and rainfall.

## **Soil**

Sandy soil/swamp soil/saline soil influence growth of different types of vegetation.

Vegetation on slopes is determined by soil catena.

## **Drainage**

Vegetation is as luxuriant along water courses/along coastal flats because surface water supply is reliable/waterlogged areas support swamp vegetation.

## **Human activities**

Settlement/mining/ farming interferes with the original vegetation leading to growth of secondary / derived vegetation/desertification.

## **Wild animals**

Destroy vegetation leading to secondary type/desertification. They aid in seed dispersal.

6. State two reasons why mountain top have no vegetation.

- Temperatures are too low to support plant growth.
- There is no soil to support plant growth/bare rock.
- Water is in frozen state.

7. Vegetation refers to plant life on earth surface.

8. Areas where coniferous forests are found.

- Cool temperate continental climate/Siberian type.
- Cool temperate eastern margin- Laurentian type.
- West coast of Canada.
- Scandinavian region

9. Characteristics of temperate grasslands

- Trees are scarce except along water courses.

- In moist areas the grass is tall.
  - Where it is drier there is short tough grass
  - Grass withers in autumn and dries up in winter but sprouts during spring.
  - Presence of scattered trees
  - Common trees are acacia
10. Secondary vegetation comprises natural processes colony on a place which is in the process of receiving due to interference by man while planted vegetation comprises of plants grown in a place by people e.g. agro forestry.
11. Two significance of vegetation to physical and human environment.
- Vegetation is of aesthetic value as it adds beauty to landscape.
  - Vegetations roots binds soil together protecting soil against erosion
  - Plant decay to form humus adding fertility to soil.
- a)
    - Ground close-up
    - Acacia vegetation
  - b)
    - Thorny like leaves to reduce rate of water loss.
    - Have long tap root to tap underground water
    - Plant seeds remain dormant awaiting short rains.