**WEEDS AND WEED CONTROL**

1. Oxalis (sorrel)

 -(oxalis latifolia)

b)- The weed contain builbs i.e Elaborate & extensive root system that support the plant.

 - Because it has rhizomes.

 c) State the economic importance of the weed shown.

 - Reduces yields of crops.

 - Increases cost of production.

 - It’s a livestock feed.

 - Fixation of nitrogen.

2. (a)Couch grass Digetaria Scalarum ( ½mk)

 (b) Why is it difficult to control the weed?

* It has got underground rhizomes which grow deep in the soil ( ½ x 1pt = 1mk)

 (c) One harmful effect of the weed on crop production

* Competes with crops for nutrients/soil moisture and space resulting to low yields
* Increases the cost of production when controlling it

 (d) Two measures used to control the wed

* Use of appropriate herbicides

- Physical removal of rhizomes

3. i)- A-Double thorn (oxygonium sinuatum)

 - B- Coach grass (Digiteria scalarum)

 ii) - Lower the quality of produce

* Lower yields
* Compete with intended plants for nutrients and water

 iii) Weed B is difficult to control as it has underground rhizomes

 iv) Can be effectively controlled by use of chemicals

4. Four methods of propagation which make weeds to have a high competitive ability over crops

* Availability to produce many viable seeds
* Ability to propagate vegetative –with bulbs, rhizomes
* Ability to regenerate woody stems-quickly
* Efficient means of propagation

Ability to remain viable in the soil for a long period of time

5. Weed C – Nutgrass (Cyprus rotundus)

 Weed D – Sow thistle (sonchus oleraceous)

6. a) - Thorn apple

* Sodom apple
* Oxalis
* Tick berry ( ½ x4=2 mks)

 b) - Before flowering to avoid spread through seeds

 - Early stage before spreading underground organs

7.

* Requires skilled labour
* Have long residual effect which interferes with future crops

It is not environmental friendly/ pollutes the environment

8. a)

* MCPA
* 2 - 4 – D
* Bentazon
* Bromoxynil
* Linuron
* Loxyyril
* Atrazine
* Metrubuzin

b) - 10 – 15cm high

 - 2 – 4 weeks after emergence

9.

* Complete for nutrients/ light/ space
* ACD as alternate host of insect pests
* Some produce poisonous substances
* Blocks water cords
* Lowers the quality of pasture
* Poisonous to man and livestock
* Parasites of desired crops
* Aquatic weeds affect navigation and water animals
* Increase the cost of production
* Cause irritation to workers
* Some have medicinal value
* Eaten by man and livestock
* Acts as soil cover
* Add organic matter in the soil

- Some are legumes

10. a) two factors that affect selectivity of herbicides

* Stage of plants growth
* Plants morphology and anatomy
* Mode of action
* Environmental factors (2x1=2mks)

11. specific examples of weeds describe their harmful effects in agricultural production

* Compete with crops for nutrients spacing ,light, moisture lowering yield e.g. MacDonald’s eye etc
* Some are parasitic e.g. wihhweed
* Low quality of produce e.g. Mexican marigold lowering quality of milk/pigweed seeds in finger millet
* Poisonous to both man and livestock e.g. Dahira stramonium, Bracken fern
* Allirnate hosts for pests and diseases e.g. mallow weed –for cotton strainer
* Some are allelopallic/hinder germination e.g. Mexican marigold
* Block irrigation channel e.g. salvinia/water hyacinth
* Affect fishing and navigation-salvinia and water hyacinth
* Lower quality of pasture e.g. manyatta grass
* Reduce workers efficiency/irritate e.g. double thorn, shnging nelthe, devil’s horse whip