TYPICAL QUESTION

**Q1/ Define the following terms bellow:**  **(25 Marks)**

1-

2-

3-

4-

5-

**Q2/ Explain the followings:** **(30 Marks)**

1. The requirement which need for forage establishment.
2. The Characters of Alfalfa verities that mainly valid for grazing.
3. Economic importance of Alfalfa.

**Q3/ Fill-in the following blanks:**  **(20 Marks)**

a.……………….,b ……………….., c …………………….

2.

a.……………….,b …………………

3.

a.……………….,b ………………..

4.:

a.……………….,b ……………….., c …………………….

**Q4/ write about Alfalfa pasture types? (25 Marks)**

*Good luck*

***Rekawt Rahman Ismaiel***

Typical answer

Q1/ 1- **Forage:** Vegetative plant parts (i.e leaves, flowers and stems of plants) eaten by animals, could be domesticated or wild animals.

2- **Feed:** Is a more general term that includes also non-vegetative plant parts e.g grains, seed etc. fed to animals. Sometimes, it is difficult to differentiate between feed, forage and fodder, for example when animals consume the seed head and other part of herbaceous plants together.

3- **Silage:** storage in isolation from the air and transformed sugars to lactic acid and reduced PH from (6-7) to 4, stop action of bacteria and remains conservative on the nutritional value.

4- **Digestibility** Digestibility (the extent to which forage is absorbed as it passes through an animal’s digestive tract) varies greatly. Immature, leafy plant tissues may be 80 to 90% digested, while less than 50% of mature, stem my material is digested.

**5- Palatability** Animals select on forage over another based on smell, feel, and taste. Palatability may therefore be influenced by texture, leafiness, fertilization, dung or urine patches, moisture content, pest infestation, or compounds that cause a forage to taste sweet, sour, or salty.

Q2/

1. **Forage Establishment**

The way for production of success full fodder begins with field has good plants and can't get it, only by achieving the following requirements:

1. The use of good and vitality seeds and suitable varieties to the conditions of the region.
2. Prepare the appropriate seedbed.
3. Planting seeds at a suitable depth.
4. Weed control.
5. **Disadvantage of Alfalfa varieties:**
6. Lack of forage production.
7. Weak resistance to disease and insects.
8. Strongly influenced by environmental conditions.
9. **Economic importance:**

It was important economic crops called the queen of forage crops. planting widely in the world and this distribution reasons for:

1. Produce high amounts of forage.
2. Have high nutritional value.
3. High protein content may reach (20 - 25%).
4. Adapt to varying environmental conditions.

Q3/

1. **Hardy alfalfa b- Medium hardy c- Not hardy alfalfa**
2. Availability of moisture.
3. Plant type.
4. Forage type.
5. Seedbed.
6. Soil fertility.
7. a- **Sowing in water b- Dried sowing**
8. Common leaf spot: caused by *Pseudopeziza medicaginis*appeare brown spots on leaves.
9. Dodder (*Cuscuta spp*.)
10. Leaf worm (army worm)
11. Beet army worm
12. Alfalfa Weevil
13. Red spider
14. Grasshoppers

Q4/ **Alfalfa pasture types:**

Some alfalfa varieties valid mainly for grazing and planting mixtures with some grasses. These varieties plants characterized by the following:

1. Have the potential to Spanning and spreading. Spanning would be through:
2. Short rhizomes arises from the crown area such as Rhizoma, Severla and Teton.
3. Spreads by creeping roots grow from the root. These varieties known with creeping rooted alfalfa such as Rambler and Travois.
4. Deep-set crown (lower the crown area below the soil surface).
5. Slow growth after grazing.
6. Drought-tolerant and cold due to the large root.