



Q / Modern agricultural practices, such as fattening cows on grains or on feed lots, have detrimental (Bad) effects on the environment and animals? While feeding practices can improve animal impact? give examples.

Q/Define the following terms:

Animal feed, Forage, Diet, Feed nutrient, Oven-dry matter basis, As- fed basis, As-air dry basis, Silage

Q/How can feedstuffs evaluate?

Q/ What are the three basic functions of feed nutrients?

Q1/fill the following blanks:

1- Dry forages and roughages are high in,, and possibly and low in readily digested carbohydrates such as and

2- Forages & roughages commonly are divided into and

3- As a general rule, legumes and grasses have about the samecontent.

4- By using laboratory and/or farm animals can be determine the.....,, andof a feedstuffs.

5- Many different feed nutrients those currently recognized are as.....and

6- Water is important in feed storage and Some approximate maximum tolerances are in ground feeds% , grass hay.....% and

7- The accessory function of feed nutrient is..... .

8- The moisture content of succulent roughages & forages is usually between%, but can be quite variable, Wheat pasture can be as high as% moisture.

9- The rate of change is much greater for some plants than for others, for example, retain good palatability over a wide range of maturities.

10- are very palatable and digestible when young, but lose these characteristics quickly as they mature.

11- **Nonnutritive Additives include**,,,, and

12- **Fish meals are usually good**and**sources**

Q/ feed have the following composition on a fresh basis:

Phosphorus 0.16%

Carotene 110 mg/kg

1- How many mg /lb and PPM of phosphorus are in the fresh feed?

2- What is the % carotene in the fresh feed?

Q/ The composition of feeds may be expressed on any one or more of three dry matter bases what are these?

Q/ If a feed contain 4% crude protein on a fresh basis and 75%water, calculate % of crude protein on an air –dry basis.

Q/ Count the characteristics of good-quality of silage.

Q/ Count variables affect the nutritive content of forages and roughages.

Q/ All feeds have been segregated into groups classify it?

Q/ Talk about **dry** forages and roughages.

Q/ /Why Legumes are generally better quality feed than grasses?

Q/ why there is misconception that ensiling improves the nutritive content of a feed?

Q/ What are three major sources of protein supplements?

Q/Write some reasons of using Nonnutritive Additive.

Q/Put (T) or (F) with correcting the false sentences:

1-Many variables affect the nutritive content of forages and roughages and the most important factor is plant species.

2- Protein increases with maturity young plants may contain only 20% crude fiber.

3- Seeds that have a fibrous outer hull are higher in crude fiber. The lower fiber levels tend to be the lower energy content.

4- Feeds in protein supplements contain less than 20% crude protein.

5- The process of ensiling, the process of producing silage from forage plant material under *aerobic* conditions.

6- Feed that consumed as a mature, weathered, low-quality feed during the winter months and is thought of as forage.

7- Grasses have much higher protein, calcium, and carotene contents than legumes.

8/ Ruminants can convert the poorer quality proteins to higher quality microbial protein.

9/ The most important oilseed meals sources are soybeans and cottonseed.

10/ The oilseeds are low in Ca and high in P.