**LIVESTOCK PRODUCTION II (NUTRITION)**

1. Production ration may be utilized by dairy goats in:

* Milk formation
* Growth

- Foetal/embryo development

2. Use Pearson’s square method to calculate how much of the feedstuffs a 150kg rations (5mks)

**18%**

**DCP**

**10% DCP**

**12 parts of maize bran**

**Sunflower**

**30% DCP**

**8 parts of sunflower**

**20 Total parts**

Maize bran = 12 x 150 = 90kg maize bran

 20

Sunflower 8 x 150 = 60kg sunflower

 20

3. i) Water (1mrk)

* Transport medium
* For metabolic processes
* Regulates body temperature
* Maintains shell shape
* Component of livestock product
* Lubricant of body joints (2x ½ = 1mk)

 ii) Vitamin A (1mrk)

* Bone formation
* Prevents diseases / Increases disease resistance
* Improves vision

Improves vigour/ for proper growth

4. Rumen.

5. i) A ration containing 18% protein is to be made from maize and sunflower cake. Given

 that maize contains 7% protein, and sunflower seed cake 34% protein. Use Pearson square

 methods to calculate the value of feedstuffs to be used to prepare 100kgs of the feed (3mks)

ii) two other methods that can be used to formulate

 feed ration

* Linear programming
* Trial and error

Graphical method.

6. (a) The daily amount of food given to an animal/ the amount of food given to an animal

per day

Maize

10%

28%

Cotton seed

6/18 parts of cotton seed

total parts

12 parts of maize

16

(b) Quantity of maize = 12 x 200Kg

 18 = 133.33kg

Quantity of cotton seed = 6 x 200

 18 = 66.67kg

7. Hormones

Antibiotics

Medicants

8.

* Qualities of roughages
* Availability of the concentrates
* Level of production
* Physiological states of the animals
* Quality of concentrates
* Economic factors

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