

Higher National Diploma in Technology (Agriculture)
Second Year, Second Semester Examination – 2015
AG2215 – Animal Feed Technology

Instructions for Candidates:

Part i : Answer all questions.

Part ii : Answer 2 questions only.

No. of questions : 5

No. of pages : 03

Time : 1.5 hours

PART I

Q1.

i) Give two pasture grass suitable for Up Country Wet Patana.

- 1. -----
- 2. -----

(4 marks)

ii) Give 3 factors influencing the use of fertilizer for a pasture land.

-
-
-

(3 marks)

iii) What are the scarifications method used in establishment of legumes?

-
-
-

(4 marks)

iv) What is a “Balanced Diet”?

-
-

(3 marks)

v) Give the meanings of following terms used in Animal Feed Technology.

Pasture: -----

Fodder: -----

(4 marks)

vi) State two ways of defoliation in a pasture or fodder land.

-
-

(2 marks)

(Total 20 marks)

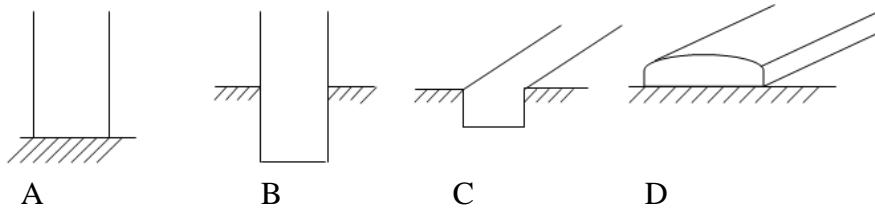
Q2.

i) Give four methods of feed formulation.

1-----
2-----
3-----
4-----

(4 marks)

ii) Write down four types of siloes for silage making



A :-----
B :-----
C :-----
D :-----

(4 marks)

iii) Give four characteristics of good quality silage.

(4 marks)

vii) List four factors to be considered when selecting a pasture or fodder species for an area.

(4 marks)

v) Give 4 advantages of selecting a pure stand for a pasture land.

(4 marks)

(Total 20 marks)

PART – II

Q3. (Total 30 marks)

- i) Explain the important characteristics of a ration. (15 marks)
- ii) For an aquaculture farm with 500 Gift Tilapia needs 5 kg of growth ration mixture. A feeding standards table shows that a 24% crude protein ration is needed. Maize and Soybean oil meal (SBOM) are selected as feed resources. Maize and SBOM compositions analysis test shows that they have 5.4% and 45.8% crude protein respectively on fed basis. Calculate the mixing ratio of maize and soybean oil meal need to be mixed together for 5 kg of feed? (15 marks)

Q4. (Total 30 marks)

Briefly explain **any two** of the followings

- i) Rotational Grazing (15 marks)
- ii) Treatment of paddy straw with urea (15 marks)
- iii) Cutting intensity and frequency (15 marks)

Q5. (Total 30 marks)

- i) Explain the steps of making hay? (15 marks)
- ii) Jersey cattle farmer stated that a cattle in his farm are fed with 40 kg of paddy straw/day which has the gross energy of 4000 KJ/Kg. Farmer mentioned that he disposes 2.5 Kg/day of fecal matter and 0.7 Kg/day of urine with the energy of 300 KJ/kg. Assume that Jersey cattle is utilizing 400KJ/day of energy for metabolism and heat production. Calculate the Digestible energy (DE), Metabolizable energy (ME) and Net Energy (NE). Assume that other than this there are no other losses of energy occurred. (15 marks)