[Question of Term Final Examination]

Khulna University

School: Life Science **Discipline: Agrotechnology** **Program: MS in Animal Nutrition**

Year: MS 1st **Term: 2nd** **Examination Year: 2025** **Session: 2024-2025**

Course Code: 0811 08 AN 5201 **Course Title: Feed Processing and Evaluation**

Total Marks: 60 **Time: 03** **Credit: 03**

- The FIGURES in the right margin indicate full marks. The questions are of equal value.
- Use separate sheets for each section.
- Draw and label wherever necessary.

Question No.		Question Description	Marks
		Section- B	
There are four questions in this section. Answer any three questions.			
5.	(a)	Define fodder conservation and explain its importance in livestock production. (L1, CLO3)	3
	(b)	A farmer in Khulna faces high fodder wastage during the monsoon. Apply fodder conservation principles to suggest a solution. (L3, CLO3)	3
	(c)	Critically analyze the advantages and disadvantages of fodder conservation and propose strategies to maximize benefits for smallholder farmers. (L6, CLO3)	4
6.	(a)	Explain how anaerobic conditions influence the fermentation process in silage preparation. (L2, CLO3)	3
	(b)	Given high rainfall conditions in southern Bangladesh, recommend a conservation method for Napier grass and justify your choice. (L3, CLO3)	3
	(c)	Evaluate the effectiveness of silage additives in improving silage quality, and design a practical protocol for their use. (L5&6, CLO3)	2
	(d)	Compare hay and silage in terms of moisture requirements, nutrient retention, and storage conditions. (L2, CLO3)	2
7.	(a)	Develop a farmer-friendly checklist for on-farm judging of silage quality. (L6, CLO3)	3
	(b)	Describe the principles of hay making. (L1, CLO3)	3
	(c)	Discuss the factors influencing the nutrient quality of grass hay. (L2, CLO3)	4
8.	(a)	Explain the causes and mechanisms of nutrient losses during hay making. (L3, CLO3)	3
	(b)	Compare and contrast the in-vitro and in-situ (nylon bag) techniques of digestibility determination. (L4, CLO3)	3
	(c)	According to the new protein system for ruminants, what are the two fractions into which dietary protein is partitioned in the rumen? Explain. (L2, CLO4)	4

*Levels of Bloom's cognitive domain: [L1=Remember; L2=Understand; L3=Apply; L4=Analyze; L5=Evaluate; L6=Create]