SCHOOL	**AGRICULTURE AND FISHERIES SCIENCES**		
DEPARTMENT	**ANIMAL PRODUCTION, AGRIBUSINESS & ECONOMICS**		
SUBJECT	**FEEDS AND FEEDING**		
SUBJECT CODE	**AASF 3702**		
DATE	**NOVEMBER 2023**		
DURATION	**3 HOURS**	**MARKS**	**100**

SECOND OPPORTUNITY EXAMINATION MEMORANDUM

Examiners: Dr. Maria N.T. Shipandeni & Prof. J. Mupangwa

Internal Moderator: Dr. N. P. Petrus

This question paper consists of three (3) pages including this page.

Instructions: This question paper consists of five questions
Attempt all questions!!

UNIVERSITY OF NAMIBIA EXAMINATIONS

QUESTION 1 **[20 MARKS]**

(a) Distinguish between the following terms as they relate to animal nutrition:

(i) Roughages and concentrates. (2)

(ii) Condensed tannins and hydrolysable tannins. (3)

(iii) Nutrient requirement and Nutrient allowance. (2)

(iv) Dry matter, Dry Matter Basis and As-fed Basis. (3)

(b) Substantiate the following statement: Feeding is the most important factor in successful farming. (10)

QUESTION 2 **[20 MARKS]**

(a) State the characteristics of plants suitable for hay making. (5)

(b) The essential process of silage making entails the transformation of carbohydrates into organic acids via bacterial fermentation. Briefly describe the ensiling process. (15)

QUESTION 3 **[20 MARKS]**

(a) Define the term "Contaminant" as it applies to animal feeds. (3)

(b) Describe the environmental contaminants that affect animal feeds. (7)

(c) Briefly discuss how the following factors affect feed intake in grazing ruminants.

(i) The rumen fill (5)

(ii) Nutrient content of forage (5)

QUESTION 4 **[20 MARKS]**

(a) Discuss the potential of encroacher bush as feed for livestock and game animals in Namibia. (10)

(b) Explain why the use of chicken litter/manure as livestock feed is prohibited under FAN Meat Scheme in Namibia. (5)

(c) Elaborate on the importance of roughage in ruminants. (5)

QUESTION 5 **[20 MARKS]**

(a) You are tasked to address a group of Namibian beef cattle producers on a topic titled: "Maximizing the utilization of cereal straws as livestock feed". Give a detailed description of the areas that your presentation will include. (15)

(b) Elaborate on the importance of polyethylene glycol in tannin-rich feedstuffs. (5)

END OF PAPER