

NATIONAL OPEN UNIVERSITY OF NIGERIA FACULTY OF AGRICULTURAL SCIENCES DEPARTMENT OF ANIMAL SCIENCE AND FISHERIES September, 2020_1 Examination

COURSE CODE: ANP 512

COURSE TITLE: PASTURE AND RANGE MANAGEMENT

CREDIT UNIT: 2 CU

TOTAL SCORE: 70 MARKS **TIME ALLOWED:** 2 Hours

INSTRUCTIONS: ANSWER QUESTION 1 (25 MARKS) AND ANY OTHER THREE

(15 MARKS EACH)

Q1 a Define Range management.

b Distinguish between legume and shrubs.

c Briefly explain the following types of vegetation

i Sahel savanna

ii Montane

iii Mangrove zone

d Distinguish between primary and secondary introduction of plants.

e Explain the tips to be considered for pasture maintenance for the months of June and July. **25 marks**

- Q2 a Explain "cut and weigh" and "falling plate" as a method of forage yield determination.
 - b What do you understand by the following terms:
 - i Grazing system
 - ii Forage
 - iii Range condition
 - iv Paddock

v Forb 15 marks

- Q3 Explain the following methods of plant breeding
 - i Marker-assisted breeding
 - ii Mating systems
 - iii Double Haploid breeding 15 marks
- Q4 Expatiate on the following as factors to be considered when establishing a pasture
 - i Soil fertility
 - ii Seedbed preparation
 - iii Specie selection 15 marks
- Q5 Discuss the phases of silage fermentation. 15 marks
- Q6 i State the key principles in developing a grazing plan.
- Q6 ii Explain "Increasing usability of range" as a major phases of scientific range management. 15 marks