

(Knowledge for Development)

# KIBABII UNIVERSITY

## UNIVERSITY EXAMINATIONS 2021/2022 ACADEMIC YEAR

#### THIRD YEAR FIRST SEMESTER MAIN EXAMINATION

### FOR THE DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION

**COURSE CODE:** 

**ACR 312** 

COURSE TITLE:

PASTURE AND FODDER CROPS

DATE:

19<sup>TH</sup> MAY 2022

TIME: 9-11 AM

#### INSTRUCTIONS TO CANDIDATES

Answer Question ONE and any other TWO Questions.

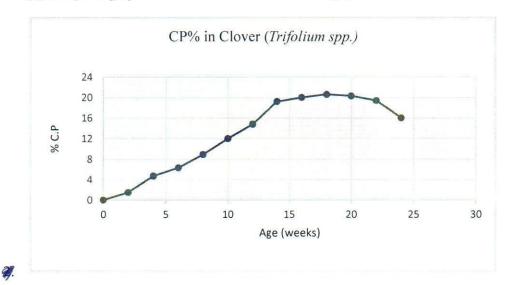
TIME: 2 Hours

This paper consists of 2 printed pages. Please Turn Over



KIBU observes ZERO tolerance to examination cheating

1. (a) Study the graph below and answer the following questions: -



- (i) Explain the relationship between crude protein (CP %) content and age in the given pasture species. (3 marks)
- (ii) State the highest CP % content recorded and when it was recorded. (2 marks)
- (iii) Briefly discuss the behaviour of the curve between 20-24 weeks. (5 marks)
- (b) A farmer purchased 150 kg of DAP (18:46:0) to plant his 0.80 Ha field with Boma Rhodes (*Chloris gayana*). He top dressed the pasture with 200 kg/ha of Urea.
  - (i) Calculate the rate of phosphate applied per acre. (5 marks)
  - (ii) Estimate the total Nitrogen (N) applied on the farm. (5 marks)
- (c) Briefly highlight the desired characteristics of a good fodder species. (10 marks)
- 2. Discuss the effect of plant and ecological factors on pasture availability for year-round livestock feeding in Kenya. (20 marks)
- 3. Describe the procedure for hay preparation stating the precautionary measures against loss of the pasture quality. (20 marks)
- 4. Identify the types of pastures grown in Kenya and explain the advantages and disadvantages of their methods of propagation. (20 marks)
- 5. Discuss the effect of grazing management on pasture and fodder production in Kenya. (20 marks)