



(Knowledge for Development)

KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS 2020/2021 ACADEMIC YEAR

FOURTH YEAR 2ND SEMESTER SPECIAL/SUPPLEMENTARY EXAMINATION

**FOR THE DEGREE OF BACHELOR OF SCIENCE AGRICULTURE AND
BIOTECHNOLOGY & BACHELOR OF SCIENCE AGRICULTURE
ECONOMICS AND RESOURCE MANAGEMENT**

COURSE CODE: SAB 410

COURSE TITLE: FERTILIZER MANUFACTURE AND
FORMULATION

DATE: 19TH JANUARY 2022

TIME: 8 – 10 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) Define the following terms:

i) Animal Slurry (2 Marks)

ii) Heat treated Fertilizer (2 Marks)

iii) Granulation (2 Marks)

iv) Physical Compatibility of ingredients (2 Marks)

v) Biofertilizers (2 Marks)

c) Discuss various ways of how nutrients are lost from FYM. (12 Marks)

d) State how Night soil can be processed for use as a fertilizer. (2 Marks)

e) Using equations, describe the manufacture of biuret in urea fertilizer. (6 Marks)

2. Describe the factors affecting the phosphate fertilizer use in sub-Saharan Africa.

(20 marks)

3. a) Describe how to make fish emulsion liquid fertilizer. (10 Marks)

b) Briefly explain factors to take into consideration when selecting a site to put up a blend factory (10 Marks)

4. Describe the manufacture of Phosphate fertilizers (20 Marks)

5. a) State and briefly explain the characteristics of ideal green manure crop.

(16 Marks)

b) State the Rhizobium bacteria that nodulates the following legume crops

- Soybeans
- Chicken pea
- Alfalfa
- Common beans.

(4 Marks)