



SOUTH EASTERN KENYA UNIVERSITY

UNIVERSITY EXAMINATIONS 2017/2018

FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURE

ASS 301: SOIL FERTILITY AND FERTILIZER USE

DATE: 15TH DECEMBER, 2017

TIME: 4.00 -6.00 PM

Answer **all** questions in section A and **two** questions in section B

SECTION A

Q1. Write short notes about

- (a) Soil texture
- (b) Movement of water in the soil
- (c) Infiltration (5 marks each)

Q2. Briefly explain

- (a) Soil structure
- (b) Available water
- (c) Soil effect on root development (5 marks each)

SECTION B

Q3. Discuss

- (a) Ion exchange in a farm soil
- (b) Natural fertilizers in Agriculture (10 marks each)

Q4. Describe in details

- (i) Macro and micro-nutrients
- (ii) Organic fertilizers (10 marks each)

Q5. Discuss

- (a) Essential plant nutrients
- (b) The common manifestations of plant nutrient deficiencies (10 marks each)