

**UGANDA MARTYRS UNIVERSITY
FACULTY OF EDUCATION
SEMESTER ONE SUPPLEMENTARY/SPECIAL EXAMINATION 2018/19
BACHELOR OF EDUCATION (PRIMARY) YEAR ONE
AGRICULTURE EDUCATION**

PAPER TWO: SOIL WATER ENGINEERING AND SOIL FERTILITY

Date: Tuesday 27th August 2019 Duration: 3hrs

Time: 9:30am-12:30pm

Instructions:

- Follow the instructions on this question paper and the answer booklets carefully.
 - Attempt **FOUR** questions.
 - Clearly indicate the **QUESTION NUMBER** you attempt.
 - Write your essays clearly using illustrations where applicable, grammatically correct English, connective words and paragraphs of at least four sentences.
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1. a) In what ways, can farmers maintain soil fertility
b) Explain the importance of organic matter in the soil.
2. In your view as an agriculture student, what practices can farmers adopt to be able to harvest better from their fields?
3. There are several irrigation methods available for use by farmers. Which of these methods are suitable for farmers from your village? Explain your answer.
4. Describe how you would tell that erosion is occurring. How can you help a peasant farmer to control erosion on his farm?
5. There are various methods of soil conservation, explain at least five methods that are most commonly used.
6. Describe the factors influencing water erosion.
7. A given fertilizer has a guaranteed analysis of 10 – 24 – 16 contained in a 50kg bag.
 - a) Calculate the quantities of NPK.
 - b) if the rate of application of 12 – 48 – 48 is 200kg per hectare. What will be the rate of application of 10 – 40 – 40?
8. a) How can farmers reduce leaching of fertilizers in the garden?
b) How are fertilizers dangerous to humans and the environment?

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