



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2016/2017

**THIRD YEAR SECOND SEMESTER EXAMINATION FOR THE
DEGREE OF BACHELOR OF SCIENCE IN SOIL SCIENCE AND
PLANT NUTRITION WITH INFORMATION TECHNOLOGY**

MAIN CAMPUS

ASS 306: SOIL-LESS PLANT GROWTH MEDIA

Date: 20th June, 2017

Time: 3.30 - 6.30pm

INSTRUCTIONS:

- Answer ALL Questions in section A and any other TWO in section B.



SECTION A: Answer ALL questions in this section.

QUESTION 1:

Explain the following in the context of Edaphology

[5 marks]

- (a) Solum
 - (b) Hydroponics
 - (c) Substrate
 - (d) Surfactant
 - (e) Peat-lite
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QUESTION 2:

Distinguish between the following:

[10 marks]

- (a) Vertical agriculture and horizontal agriculture
 - (b) Inorganic and organic soil
 - (c) Peat and muck
 - (d) Potted plants and bedding plants
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QUESTION 3: Outline the following:

[15 marks]

- (a) Peat moss
- (b) Leaf mold
- (c) Rockwool

SECTION B: Answer any TWO questions in this Section

QUESTION 4:

[20 Marks]

Discuss the advantages of hydroponics over field soil agriculture

QUESTION 5:

[20 Marks]

Discuss the roles of a wetting agent in a soil-less medium

QUESTION 6:

[20 Marks]

Discuss the five (5) objectives that must be met by any recommendable soil – less medium
