



MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS

2018/2019 ACADEMIC YEAR

FOURTH YEAR SECOND SEMESTER

**SCHOOL OF TOURISM AND NATURAL
RESOURCE MANAGEMENT
BACHELOR OF ENVIRONMENTAL STUDIES**

COURSE CODE: EPM 415

**COURSE TITLE: SOIL FOR ENVIRONMENTAL
SCIENCE**

DATE: 24/04/2019

TIME: 08.30- 10.30A

INSTRUCTIONS TO CANDIDATES

INSTRUCTIONS: ANSWER ALL QUESTIONS IN SECTION A (25 MARKS) AND ANY THREE IN SECTION B (45 MARKS)

SECTION A (25 MARKS)

1. Why does soil have numerous and varied definition? **(2 mks)**
2. What basis is used to classify soil structure? **(3 mks)**
3. Briefly describe Cation Exchange Capacity (CEC) **(2 mks)**
4. Using illustrations, briefly describe the functionality of the standard soil texture triangle. **(2 mks)**
5. Using illustration as appropriate, write short notes on
 - a. Soil as a redundant system **(2 mks)**
 - b. Nutrient Cycle **(2 mks)**
 - c. Soilscape **(2 mks)**
6. Using relevant examples, explain the following characteristics and process associated with soils:
 - a. Drainage vrsus permeability **(2 mks)**
 - b. Regolith versus Parent Material **(2 mks)**
 - c. Polypedon versus Soilscape **(2 mks)**
 - d. Porosity versus Specific Surface **(2 mks)**
 - e. Insolation versus Reradiation **(2 mks)**

SECTION B (45 MARKS)

7. Discuss in sufficient detals the role of soil organisms **(15 mks)**
8. Using illustrations as appropriate, discuss in sufficient details the five (5) factors that influence soil formation. **(15 mks)**
9. Using examples as appopriate discuss in sufficient details the factors/characteristics used in soil clasiification. **(15 mks)**
10. In sufficient details discuss the three weathering process. **(15 mks)**

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