



UNIVERSITY EXAMINATIONS

SECOND YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURE, AQUACULTURE, & ANIMAL SCIENCE

SECOND SEMESTER 2024/2025

[JANUARY – APRIL, 2025]

SOIL 100: INTRODUCTION TO SOIL SCIENCE

STREAM: Y2 S2

TIME: 2 HOURS

DAY: MONDAY, 12:00 - 2:00 P.M.

DATE: 14/04/2025

INSTRUCTIONS:

- 1. Do not write anything on this question paper.***
- 2. Answer question ONE(Compulsory) and any other TWO questions.***

QUESTION ONE (30 MARKS)

- (a) Explain the following as used in soil science:
- Peat soil and solum (2 mark)
 - Eluviation and illuviation. (2 marks)
- (b) Distinguish between geologic (GE) and accelerated (AE) types of erosion. (2 marks)
- (c) Discuss the ecological functions of the soil in the ecosystem. (4 marks)
- (d) Discuss the uses of diatomite. (4 marks)
- (e) Discuss the main uses of industrial minerals. (4 marks)
- (f) Describe the main types of rocks. (6 marks)
- (g) Explain the main components of soil by volume. (6 marks)

QUESTION TWO (20 MARKS)

- (a) Discuss the soil orders. (10 marks)
- (b) Discuss the main layers of atmosphere from the Earth upwards. (10 marks)

QUESTION THREE (20 MARKS)

Weathering refers to the breakdown and decomposition of rocks and minerals into products that are in equilibrium with the environmental conditions. Discuss the main types/ agents of this process. (20 marks)

QUESTION FOUR (20 MARKS)

Discuss the main factors that significantly influence soil formation. (20 marks)