



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR**

FIRST YEAR SECOND SEMESTER EXAMINATIONS

**FOR THE DEGREE
OF
MASTER OF SCIENCE IN SOIL SCIENCE**

COURSE CODE: ASL 809

COURSE TITLE: SOIL SURVEY AND LAND EVALUATION

DATE: 23.04.2024

TIME: 3-5PM

INSTRUCTIONS TO CANDIDATES

Answer any **FOUR** questions

TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over.

1. Discuss how to acquire, manipulate, interpret and present the following:
 - a) Soil maps (5 Marks)
 - b) Topographic maps (5 Marks)
 - c) Watershed maps (5 Marks)
2. You were tasked with carrying out soil survey and mapping across Kakamega County. Discuss the procedure to be used and the limitations associated with soil survey (15 Marks)
3. Differentiate convex and linear landscape segments and describe their impact on soil and hydrologic properties and land use (15 Marks)
4. Discuss the land suitability classes of the FAO framework classification and explain with reasons places in Kenya that well suit each classification (15 Marks)
5. Discuss the limitations of crop simulation modelling (15 Marks)