



**FIJI NATIONAL UNIVERSITY**  
**College of Agriculture, Fisheries & Forestry**  
**School of Agriculture**

**Department of Soil Science & Agril Chemistry**  
**FINAL EXAMINATION: 2016**

**B.Sc Agriculture III<sup>rd</sup> year: Trimester II<sup>nd</sup>**

**SOIL SURVEY AND LAND USE INTERPRETATION (SAC 702)**

**TOTAL MARKS: 50**

**TIME ALLOWED: 3:10 HOURS**

**INSTRUCTIONS:**

This paper consists of two (2) pages. Please check to see that your paper is complete.

**Answer all questions in the answer booklet.**

- Number your answers correctly in the provided answer booklet.
- Write your student ID number on all pages that you use including any additional sheet paper.
- Printed or written study materials are not allowed into the examination hall.
- Mark values appear at the end of each question or part thereof.

**"MOBILE PHONES ARE STRICTLY NOT ALLOWED"**

**WRITE THE SHORT ANSWER FOR GIVEN QUESTIONS****Attempt all questions**

1. What do you understand with transitional horizons? Draw a neat sketch (5 marks) of hypothetical soil profile and explain all master horizons.
2. What do you understand with subordinate distinctions? Explain any (5 marks) eight (8) subordinate distinctions within master horizons.
3. What do you understand by epipedons. Briefly explain important (5 marks) characteristics of any four (4) of epipedons.
4. What do you understand with soil moisture regimes? Explain any four (5 marks) (4) classes of soil moisture regimes used in soil taxonomy for soil classification.
5. What do you understand with soil survey? Explain the reconnaissance, (6 marks) semi-detailed and detailed soil survey.
6. What are the important categories of the soil taxonomy? Write the name (6 marks) of the any six soil orders with their formative elements as per soil taxonomy.
7. Explain the Land Capability Classification (LCC) and briefly discuss (6 marks) the structure of capability classes and sub classes.
8. Write the important characteristics of given soil orders. i) Vertisols ii) (12 marks) Aridisols iii) Entisols iv) Oxisols.

**END OF EXAMINATION PAPER**