

FIJI NATIONAL UNIVERSITY

COLLEGE OF AGRICULTURE, FISHERIES AND FORESTRY

FINAL EXAMINATION: 2013

B.Sc Agriculture IIIrd year: Trimester IInd

SOIL SURVEY AND LAND USE INTERPRETATION (SAC 702)

TOTAL MARKS: 50

TIME ALLOWED: 3:10 HOURS

INSTRUCTIONS:

This paper consists of three (3) 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"

Good Luck

WRITE THE SHORT ANSWER FOR GIVEN QUESTIONS

Attempt any 10: Each 5 marks= total 50 marks

1. What are the soil forming factors? Differentiate between active and passive factors of soil formation.
2. Explain the climate factor of soil formation. List down the components of climate factor of soil formation and explain any one in brief.
3. What are the components of biosphere factor of soil formation? Name them and briefly explain any one.
4. Define soil profile and draw a neat and labeled sketch of soil profile showing all its horizons with proper explanation.
5. Define the soil horizon and explain the difference between eluviations and illuviation.
6. List down any 10 sub ordinate distinction of master horizon with their main features.
7. What are the purposes of soil classification? Write a short note on characteristics of soil taxonomy.
8. What do you understand by epipedon and endopedon. List down the name of epipedons and write the important characteristics of any two of them.
9. What do you understand by sub surface horizons? List down the name of any 10 with their important characteristics.

10. Give the important categories of the soil taxonomy and write the name of all soil orders with important characteristics.
11. Explain the type of soil temperature regimes used in soil taxonomy for soil classification.
12. Explain the type of soil moisture regimes used in soil taxonomy for soil classification.
13. Write the important characteristics of given soil orders. i) Aridisol ii) Entisol iii) Mollisol iv) Oxisol v) Vertisol.
14. What do you understand with soil survey? Explain the reconnaissance, semi-detailed and detailed soil survey.
15. What are the purpose and principles of land evaluation?
16. What do you understand with Land Capability Classification (LCC)? Explain the structure of capability classes and sub classes.
17. What are the criteria's to classify land into different capability classes explain the assumptions of the USDA land capability classification.
