



UNIVERSITY OF RUHUNA  
FACULTY OF AGRICULTURE

First Examination in BSc Agricultural Resource Management & Technology

(Part- II) – September/October 2020

Agroecology & Sustainable Agriculture (CS1201)- Theory

Answer all questions (4)

Time: 2 Hours

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- 1.(i) What is a system? (10 marks)
- (ii) Identify main characteristics of a system by giving an appropriate example (20 marks)
- (iii) Briefly explain the advantages of using holistic approach to solve complex problems in agriculture (30 marks)
- (iv) “Agroecosystems are identified as semi-domesticated systems”. Explain the statement giving reasons (40 marks)
2. Briefly discuss followings
- (a) The principles of agroecology (25 marks)
- (b) Interactions between plants vs plants in the ecosystem (25 marks)
- (c) The Competitive Production Principle (CPP) (25 marks)
- (d) The Facilitative Production Principle (25 marks)
- 3.(i) Define “Sustainable Agriculture” (10 marks)
- (ii) List out main issues associated with organic farming in Sri Lanka (20 marks)
- (iii) “Awareness on the importance of organic farming is poor among Sri Lankan farmers”. Discuss your opinion on the above statement (30 marks)
- (iv) Develop three (3) year action plan to make aware the farming community on organic farming (40 marks)

- 4.(i) What is meant by Biodynamic farming? (10 marks)
- (ii) What are the similarities and differences between organic and biodynamic farming? (20 marks)
- (iii) Briefly explain different niches in the ecosystem (30 marks)
- (iv) Discuss the application of niche concept for controlling pest and diseases in farming systems (40 marks)