



UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF MASTER OF SCIENCE
IN AGRONOMY

AGRI 813: CROPPING SYSTEMS

STREAMS: MSC (AGRO)

TIME: 3 HOURS

DAY/DATE: THURSDAY 05/12/2019

2.30 P.M. – 5.30 P.M.

INSTRUCTIONS:

SECTION A (20 MARKS) – ANSWER ALL QUESTIONS

1. Giving examples describe complementary interaction in plants. [4 marks]
2. Explain why tropical environments are considered most productive in comparison to temperate environments and give two reasons why yields are however low. [5 marks]
3. Explain any five limitations of alley cropping system. [5 marks]
4. Describe the three pillars of modern scientific cropping that are currently used to increase crop production. [6 marks]

SECTION B (40 MARKS) – ANSWER ANY TWO QUESTIONS

5. (a) Discuss how traditional shifting cultivation system can be improved for better productivity and sustainability in agriculture. [8 marks]
- (b) Discuss sowing as an agronomic practice in intercropping. [12 marks]
6. (a) Describe the two main social-economic reasons for the adoption of multiple cropping systems. [5 marks]
- (b) Explain the concept of solar radiation as an interaction in an intercropping system and give crop examples. [15 marks]

AGRI 813

7. Discuss humid climates and agro-forestry as a farming system for continuous cropping.

[20

marks]
