## THE NATIONAL UNIVERISTY OF LESOTHO

# B.Sc. (Crop Science Exam) CPS 2510 – Climate Smart Agriculture

Date: June 2023 Total Mark: 100 Time allowed: 3 hours

Instructions:

Answer question one, and any other 2 questions.

#### **Question One**

Explain the following terms as they are applied in climate smart agriculture:

- 1. Green House effect
- 2. Nutrition security
- 3. Ozone layer
- 4. Green house emissions
- 5. Carbon sequestration
- 6. Crop rotation
- 7. Global warming
- 8. stratosphere
- 9. Agroforestry
- 10. Climate smart Agriculture

(40 marks)

#### Question two

List and discuss three pillars of Climate Smart Agriculture explicitly describing the differences amongst them (30 marks)

#### Question three

Discuss 6 ways in which carbon dioxide emissions can be reduced through animal production practices. (30 marks)

### Question four

a) Name the five green-house gases

(5 marks)

b) Discuss how greenhouse effect occur and how the earth's atmosphere temperatures are affected

(25 marks)