

**UNIVERSITY OF KABIANGA**

**UNIVERSITY EXAMINATIONS**

**2016/2017 ACADEMIC YEAR**

**FIRST YEAR SECOND SEMESTER EXAMINATION**

**FOR THE DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURE**

**COURSE CODE: CRS 121**

**COURSE TITLE: ACROCLIMATOLOGY AND ECOLOGY**

**DATE: 28TH JUNE, 2017**

**TIME: 9.00 A.M-12.00 NOON**

**INSTRUCTIONS:**

Answer **ALL** Questions in section A and any other **THREE** Questions in section B.

**SECTION A (40 MARKS)**

Q1. Explain the following terms;

1. Climatology. (2 marks)
2. Albedo. (2 marks)
3. Ecology. (2 marks)
4. Heat index. (2 marks)
5. Weather. (2 marks)

Q2. Describe how farmers and governments can use Information Communication Technologies (ICTs) in their strategies to increase agricultural productivity. (5 marks)

Q3. Briefly explain the processes of formation of precipitation. (5 marks)

Q4. Explain the value of biodiversity to human beings. (5 marks)

Q5. a) With the aid of a well labelled diagram, describe the hydrological cycle. (10 marks)

b) Explain how man has interfered with the hydrological cycle. (5 marks)

**SECTION B (60 MARKS)**

Q6. Discuss the ecological effects caused by man’s irresponsible utilization of chemicals in the environment. (20 marks)

Q7. Explain ways in which climate prediction information can be utilized by livestock producers and agribusinesses. (20 marks)

Q8. Discuss the adaptions of plants that enable them survive in the various environments. (20 marks)

Q9. a) Describe the methods of measuring the amount of water vapour in the atmosphere. (10 marks)

b) Explain the processes of wind formation. (10 marks)