



(Knowledge for Development)

KIBABII UNIVERSITY
UNIVERSITY EXAMINATIONS
2015/2016 ACADEMIC YEAR

SECOND YEAR 2ND SEMESTER
MAIN EXAMINATION

**FOR THE DEGREE OF BACHELOR OF SCIENCE AGRICULTURE AND
BIOTECHNOLOGY & BACHELOR OF EDUCATION SCIENCE**

COURSE CODE: SAB 231
COURSE TITLE: AGROCLIMATOLOGY

DATE: 10TH MAY 2016

TIME: 9AM – 11AM

INSTRUCTIONS TO CANDIDATES

Answer all Questions in section A and any other two (2) Questions in section B.

TIME: 2 Hours

This paper consists of 2 printed pages. Please Turn Over



KIBU observes ZERO tolerance to examination cheating

SECTION A = 30 MARKS

1. a) Differentiate the following parameters as used in Agroclimatology
 - i) Weather and Climate (2 Marks)
 - ii) Soil Texture and Soil Structure (2 Marks)
 - iii) Transpiration Ratio and Consumptive Use (2 Marks)
 - iv) Drought Tolerance and Drought Avoidance Crops (2 Marks)
 - v) Geographic Growing Season and Thermal Growing Season (2 Marks)
- b) Describe the characteristics of modified equatorial climate in Coastal region (4 Marks)
- c) State the factors to be considered for artificial crop environment (5 Marks)
- d) Describe how climate influences farming (5 Marks)
- e) State the AEZ that is referred to as Tea – Dairy zone. (1 Mark)
- f) Classify crops based on Light and Temperature (5 Marks)

SECTION B = 40 MARKS

2. Discuss various environmental factors that affect crop production (20 Marks)
3. a) Why does a successful crop production require a close synchronization of crop growth cycle with the climate regime (6 Marks)
 - b) Discuss the impact of climate change on human activities (14 Marks)
4. a) Explain how vegetation affect weather and climate (2 Marks)
 - b) Differentiate between Atmospheric Drought and Agricultural Drought (4 Marks)
 - c) Distinguish between the Main zones and Sub-zones in AEZ (4 Marks)
 - d) Discuss the effect of drought on crop production (10 Marks)