

(Knowledge for Development)

## **KIBABII UNIVERSITY**

## UNIVERSITY EXAMINATIONS **2021/2022 ACADEMIC YEAR**

## SECOND YEAR 1ST SEMESTER SPECIAL/SUPPLEMENTARY EXAMINATIONS

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

COURSE CODE: AAG 231/AAG 211/SAB 231

COURSE TITLE:

**AGRICLIMATOLOGY** 

DATE:

25TH JULY 2022

TIME: 11AM - 1 PM

## INSTRUCTIONS TO CANDIDATES

Answer Question ONE and any other TWO Questions.

TIME: 2 Hours

This paper consists of 2 printed pages. Please Turn Over



KIBU observes ZERO tolerance to examination cheating

| 1. (a) Define the following terms: -   |            |
|--|------------|
| (i) Biofuel  |            |
| (ii) Silviculture  |            |
| (iii) Soil degradation   |            |
| (iv) Global warming  |            |
| (v) Renewable resource   | (5 marks)  |
| (b) List five examples of renewable resources  | (5 marks)  |
| (c) State five applications of agricultural meteorology  | (5 marks)  |
| (d) Define the green house effect and explain its significance                                     | (5 marks)  |
| (e) List five human activities that alter the water cycle  | (5 marks)  |
| (f) List five weather monitoring equipment in a weather station                                    | (5 marks)  |
|  |            |
| 2. Discuss the socio-economic and environmental concerns leading to the extended                   | ed ban on  |
| logging in the country vide Kenya Gazette Notice No. 1938 dated 26 <sup>th</sup> February 2018.    |            |
|  | (20 marks) |
| 3. Describe the water cycle and explain the different processes that lead to movements and phase   |            |
| changes in water.  | (20 marks) |
|  |            |
| 4. a) Discuss global warming stating the causes and effects of this phenomenon.                    | (12 marks) |
| b) Highlight the mitigative measures of global warming.  | (8 marks)  |
|  |            |
| 5. Explain the classification of Kenyan rangelands and its relevance to the potential agricultural |            |
| activities.  | (20 marks) |
|  |            |
|  |            |