



(Knowledge for Development)

KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS 2016/2017 ACADEMIC YEAR

THIRD YEAR 1ST SEMESTER SPECIAL/SUPPLEMENTARY EXAMINATION

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

COURSE CODE:

SAB 333

COURSE TITLE:

CROP PHYSIOLOGY

DATE:

11THSEPT. 2017

TIME: 11:30 AM - 1:30 PM

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 3 printed pages. Please Turn Over



KIBU observes ZERO tolerance to examination cheating

SECTION A - ANSWER ALL QUESTIONS (30 marks)

- 1a) Briefly discuss the role of Nitrogen in plant growth and yield. (5 marks)
 - b) Identify FIVE negative effects of heat stress (high temperature) on reproductive growth and yield of cereal crops. (5 Marks)
 - c) Explain FIVE factors that are responsible for the success of angiosperms.(5 marks)
 - d) Discuss the agricultural use of Gibberellin on plant growth.

(5 marks)

e) Outline the process of symbiotic nitrogen fixation in grain legumes

(5 marks)

f) Briefly explain how light and temperature affects photosynthesis

(5 Marks)

SECTION B: ANSWER ANY TWO QUATIONS (40 marks)

- 2. Discuss strategies of crop improvement for water deficit and heat stress tolerance. (20 marks)
- 3. Discuss the physiological process involved in seed germination and the causes of seed dormancy. (20 marks)
- 4. Discuss the agricultural uses of Auxin and Gibberrelins (20 marks)