



“Investing in Africa’s future”

COLLEGE OF HEALTH, AGRICULTURE & NATURAL SCIENCES

NACP 306: SEED SCIENCE AND TECHNOLOGY

END OF SECOND SEMESTER FINAL EXAMINATION

APRIL/MAY 2024

LECTURER: W. MANYANGARIRWA

DURATION: 3 HOURS

INSTRUCTION

**ANSWER QUESTION 1, AND ANY OTHER THREE
QUESTIONS**

NACP 306 SEED SCIENCE AND TECHNOLOGY

ANSWER QUESTION 1, AND ANY OTHER THREE

1. Describe the laboratory procedures that you followed in ascertaining **Seed Quality** in terms of purity, germination and moisture content using ISTA standards. [25 marks]
2. Critically discuss the argument that the Tripartite and Bipartite Agreements were instrumental in setting up the high standards of the seed industry in Zimbabwe. [25 marks]
3. a) Give the legal definition of the following terms as they apply to Seed Science and Technology.
(i) Container, (ii) Homogeneous, (iii) Seed lot, (iv) Post control test, (v) pure seed of legumes. [10 marks]
b) Give a brief outline of the steps followed by a seed company from the time the seed is in the field to the time the seed is ready for marketing. [15 marks]
4. a) Describe the three main types of seed treatment, outlining their advantages and disadvantages for farmers. [15 marks]
b) Outline the different types of instruments used in seed sampling, highlighting the various situations in which each instrument is used. [10 marks]
5. With reference to **either** Maize **or** Cotton, outline the seed production and certification standards with focus on, land requirements, field standards, inspection standards and laboratory standards. [25 marks]
6. In much of sub-Saharan Africa, subsistence farmers still rely on seed donations for their crop production activities. Several organizations, however, are now shifting from seed donations to **seed fairs**. Give a concise justification for this shift in practice. [25 marks]

End of Examination Paper