

"Investing in Africa's future"

COLLEGE OF HEALTH, AGRICULTURE AND NATURAL SCIENCES

ACP 208: WEED SCIENCE

BSC AGRICULTURE AND NATURAL RESOURCES WEEKEND PROGRAMME

END OF SECOND SEMESTER EXAMINATIONS

NOVEMBER 2019

LECTURER: WALTER MANYANGARIRWA

DURATION: 3 HRS

INSTRUCTIONS

ANSWER ANY FOUR QUESTIONS

All questions carry equal marks (25)

Write legibly

ACP 208 WEED SCIENCE

INSTRUCTION

ANSWER ANY FOUR QUESTIONS

- 1. *Striga* spp. or "witch weeds" are one of the major constraints to cereal production on the African continent. Discuss this statement citing specific examples. [25]
- a) What is seed dormancy? How does knowledge of seed dormancy and subsequent germination contribute to strategies used in managing the weed seed bank?. [15]
 b) With the help of an illustration, explain how the spatial arrangement of planting stations in a field affect the crop-weed competition. [10]
- 3. In as much as weeds are detrimental to crop productivity, there are several benefits derived from weed species. With the use of appropriate examples discuss the benefits of weedy plant species. [25]
- 4. With the use of appropriate examples, articulate the eco-physiological factors that have led to the dominance of weeds in agro-ecosystems. [25]
- 5. Discuss the practical applications of Herbicide Resistance Management strategies that can be used by farm managers to delay the occurrence of weeds that are resistant to herbicides. [25]
- Discuss how herbicide selectivity is achieved through a combination of the physiological aspects of the crop, the target weeds as well as the managerial acumen of the crop manager.
- 7. You have been invited by the FAO as a technician on weed management to give a presentation to extension officers on the topic "Factors limiting the adoption of herbicide technology in the Smallholder farming Sector in Zimbabwe". Give a detailed outline of some of the factors and suggest ways in which smallholder farmers can be assisted to adopt herbicide technology.

END OF EXAMINATION PAPER