

UNIVERSITY OF ESWATINI

RESIT EXAMINATION PAPER

PROGRAMME:

BACHELOR OF SCIENCE IN AGRONOMY YEAR FOUR

COURSE CODE: CPR404/CP 408

TITLE OF PAPER: WEED MANAGEMENT

TIME ALLOWED: TWO (2) HOURS

#### INSTRUCTIONS:

- 1. ANSWER ANY FOUR (4) QUESTIONS
- 2. AVOID LONG MIXED UP ESSETTS. CLEARLY IDENTIFY YOUR ANSWERS TO **EACH QUESTION**

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### QUESTION 1

In general, weeds differ from the crops with which they compete in a variety of ways. Clearly describe this difference citing appropriate examples of both.

(25 Marks)

### QUESTION 2

Developing an effective chemical weed control program requires careful consideration of a number of factors. Describe them giving brief justification.

(25 Marks)

# QUESTION 3

- a) What is the difference between herbicide-resistant crops and herbicide-resistant weeds. (5 Marks)
- b) Describe each of five (5) merits and demerits of herbicide resistant crops.
- c) Describe five (5) useful management strategies for herbicide-resistant weeds
  (10 Marks)
  (10 Marks)
  (25 Marks)

#### **QUESTION 4**

Clearly distinguish the weed flora under no-till mulch-based conservation agriculture with that under tractor-illed conventional agriculture practices. Give appropriate reasons.

(25 Marks)

# QUESTION 5

The data in Table 1 below demonstrate the influence of soybean row spacing on weed problems later in the season. Note that soybeans received a post-emergence herbicide in all row spacing. The data focus on weed resurgence after that post-emergence application.

(a) Interpret the data giving justifications for your observations

(b) Based on your knowledge of weeds, crops and their interaction, what else should have been included in the study. Give reasons.

(25 Marks)

Row spacing	Weed density	Weed biomass
(cm)	No./10 m <sup>2</sup>	g/10 m <sup>2</sup>
23	37	300
46	67	620
92	1260	1250