



UNIVERSITY OF ESWATINI

MAIN EXAMINATION PAPER

PROGRAMME: BACHELOR OF SCIENCE IN AGRONOMY YEAR FOUR

COURSE CODE: CP408/CPR404

TITLE OF PAPER: WEED MANAGEMENT

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ALL QUESTIONS

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QUESTION ONE

Explain the importance of knowing the principles of weed competition
[20 marks]

QUESTION TWO

Mention two types of cropping systems that you consider to be the most effective in weed control. For each system, describe the factors that influence their effectiveness.

[20 marks]

QUESTION THREE

Many herbicides are on the market and their effectiveness depends on the situation. How would you choose the right one?

[20 marks]

QUESTION FOUR

- (a) What makes perennial weeds so competitive? [6 marks]
- (b) How can we deal with perennial weeds? [6 marks]
- (c) Table 1 below compares the nutrient content of weed-free maize, maize-free pigweed, and maize grown with pigweed. The weed-free maize is set at a nutrient content of 100.

Question: Should more fertilizer be supplied to the maize crop or not?
Give reasons. [8 marks]

Table 1. Comparison of nutrient content of weed-free maize, maize and pigweed, and pigweed alone (Vengris et al., 1955)

	Relative nutrient content				
	N	P ₂ O ₅	K ₂ O	Ca	Mg
Weed-free maize	-----100-----				
Maize infested with pigweed	58	63	46	67	77
Pigweed	102	80	124	275	234

QUESTION FIVE

"Under small scale farming conditions, weeds present more of a socio-economic problem than a biophysical one". Discuss this statement.

[20 marks]