

"Investing in Africa's future"

COLLEGE OF HEALTH, AGRICULTURE & NATURAL SCIENCES

NACP 504: INSECT PEST MANAGEMENT

END OF FIRST SEMESTER FINAL EXAMINATIONS

NOVEMBER/DECEMBER 2022

LECTURER: W. MANYANGARIRWA

DURATION: 3 HOURS

INSTRUCTION ANSWER ANY FOUR QUESTIONS

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- 1. With the aid of relevant examples, discuss in detail the major components of an Integrated pest management programme in general. [25]
- 2. Outline the ways in which insects develop resistance to insecticides. Give suggestions on how crop protection managers can prevent or delay the onset of resistance. [25]
- 3. You have been hired by the Agricultural and Rural Development Authority (ARDA) to train field supervisors on Spraying Techniques and Calibration of Equipment. Write short notes on the following aspects;
 - a) Types of nozzles that they can select for different crop protection products.

[6]

b) Measuring spray output from a nozzle.

[6]

c) Assessment of the quality of spray from a nozzle.

[6]

d) Determining the volume of water that a farmer needs to apply per hectare.

[7]

- 4. Discuss the application of principles of an integrated pest management approach on a crop that you have studied in detail. [25]
- 5. Give a concise outline on the concept of Genetic Engineering and new prospects that it is generating in the field of Crop Protection. [25]
- 6. Discuss the different pesticide formulations that farmers can use and illustrate how these formulations influence the choice of spraying equipment that farmers can use. [25]
- 7. Discuss the mode of action of the major insecticide groups and cite specific products to support your answer. [25]
- 8. Give a concise outline of the development of pesticide resistance in insect species. Suggest ways in which this development of pesticide resistance can be slowed down. [25]

END OF EXAMINATION PAPER