



(University of Choice)

MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY

UNIVERSITY EXAMINATIONS

2021/2022 ACADEMIC YEAR

SECOND SEMESTER COURSEWORK EXAMINATIONS

FOR THE MSc IN:

PLANT HEALTH AND MANAGEMENT

(MAIN EXAMINATION)

COURSE CODE: APH 823

COURSE TITLE: PEST MANAGEMENT AND PESTICIDE SCIENCE

DATE: 28TH APRIL, 2022

TIME: 2-5 PM

Instruction to candidates

Answer ANY Three (3) Questions

MMUST observes ZERO tolerance to examination cheating

This paper consists of TWO (2) printed pages. Please turnover.

Question 1

- a) Define population dynamics (3 marks)
- b) Name any five (5) factors that characterize population (10 marks)
- c) Discuss the role of an insect community in characterizing the population dynamics of a given insect species (7 marks)

Question 2

- a) Describe the basic procedure of assessing pest damage (8 marks)
- b) Name and discuss any four (4) experimental techniques for assessing pest damage (12 marks)

Question 3

- a) Define pest risk analysis (PRA) (3 marks)
- b) Describe the three (3) major stages of PRA (12 marks)
- c) Suggest how to improve the PRA approach of pest management (3 marks)

Question 4

- a) There are three major ways of managing pests:
 - i. Biological
 - ii. Chemical
 - iii. Avoidance
- b) Discuss each method (15 marks)
- c) Define and illustrate integrated pest management (IPM) (5 marks)

