



MACHAKOS UNIVERSITY

University Examinations for 2020/2021

SCHOOL OF PURE AND APPLIED SCIENCES

DEPARTMENT OF BIOLOGICAL SCIENCES

SECOND YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE (PUBLIC HEALTH)

HPH 207: ENTOMOLOGY, PEST AND PEST MANAGEMENT

DATE: 12/8/2021

TIME: 2:00 – 4:00 PM

INSTRUCTIONS

Answer Question 1 and any other two questions

Clearly and cleanly illustrate your answer as appropriate

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Describe using examples, the three types of mouth parts found in Order Diptera (3 marks)
- b) List three key characteristic features of Order Diptera (3 marks)
- c) Classify insecticides based on their chemical composition (3 marks)
- d) Explain the role of the Rotterdam Convention (3 marks)
- e) Explain the modes of action of insecticides (3 marks)
- f) Explain the economic importance of order Siphonaptera (3 marks)
- g) Outline the economic importance of the family Culicidae
- h) Explain the safe storage of insecticides in a homestead (3 marks)
- i) Explain how rat infestation in a city can be a public health nuisance (3 marks)
- j) Explain a novel method of treating chronic wounds using insects (3 marks)

QUESTION TWO (20 MARKS)

- a) Explain the management of malaria using insecticide impregnated bed nets. (8 marks)
- b) Explain how mosquitoes are efficient vectors of malaria. (12 marks)

QUESTION THREE (20 MARKS)

- a) Discuss management of rodent infestation in a rural village (10 marks)
- b) Explain a novel method of treating chronic wounds using insects (10 marks)

QUESTION FOUR (20 MARKS)

Discuss the regulation of insecticide use in Kenya.

QUESTION FIVE (20 MARKS)

Discuss the biological control of malaria vectors.