



MURANG'A UNIVERSITY OF TECHNOLOGY

SCHOOL OF PURE APPLIED AND HEALTH SCIENCES

DEPARTMENT OF MEDICAL LABORATORY SCIENCES

UNIVERSITY ORDINARY EXAMINATION

2021/2022 ACADEMIC YEAR

YEAR **THREE** SEMESTER **ONE** EXAMINATION FOR BACHELOR OF
SCIENCE IN COMMUNITY HEALTH

MCH213: ENTOMOLOGY, VECTOR AND RODENT CONTROL

DURATION: 2 HOURS

INSTRUCTIONS TO CANDIDATES:

1. Answer question one and any other two questions
2. Mobile phones are not allowed in the examination room.
3. You are not allowed to write on this examination question paper.

QUESTION ONE (30 MARKS)

- a) Define the following terms
- i. Vector. (1 mk)
 - ii. Intermediate host. (1 mk)
 - iii. Integrated Pest Management. (1 mk)
 - iv. Economic Injury Level (E.I.C). (1 mk)
 - v. Quarantine. (1 mk)
- b) Identity the general anatomical feature of arachnids. (5 mks)
- c) i) Distinguish between a male and female weevil. (2 mks)
- ii) Outline the lifecycle of maize weevil, *Sitophilus zeamais*. (3 mks)
- d) Describe the Management of Bites and Meningoencephalitis rodents. (5 mks)
- e) Explain 5 adaptations of arthropods that makes them the most successful organisms in the world. (5 mks)
- f) Explain the factors affecting Selectivity and effectiveness of chemicals for Vermin Control. (5 mks)

QUESTION TWO (20 MARKS)

- a) Discuss the various prevention and Control measures of pests and vectors of public health importance. (20 mks)

QUESTION THREE (20 MARKS)

- a) Describe classification and identification of common pests. (10 mks)
- b) Describe the safety precautions in the use of rodenticides and pesticides. (10 mks)

QUESTION FOUR (20 MARKS)

- a) Explain hormonal control of metamorphosis. (5 mks)
- b) Describe the process of metamorphosis in insects. (15 mks)