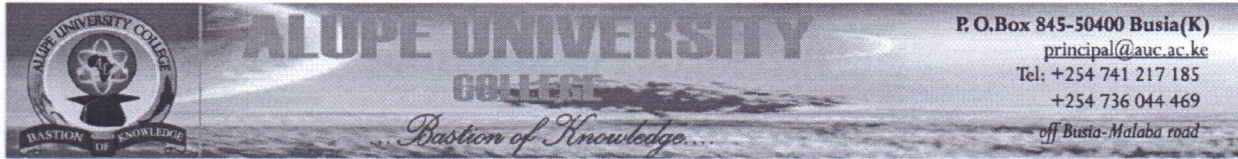


MIC 412



OFFICE OF THE DEPUTY PRINCIPAL
ACADEMICS, STUDENT AFFAIRS AND RESEARCH

UNIVERSITY EXAMINATIONS

2020 /2021 ACADEMIC YEAR

FOURTH YEAR FIRST SEMESTER MAIN EXAMINATION

**FOR THE DEGREE OF BACHELOR OF SCIENCE
IN MICROBIOLOGY**

COURSE CODE: MIC 412

COURSE TITLE: BIOLOGY OF NEMATODES

DATE: 9TH MARCH 2021

TIME: 9.00 A.M – 12.00 P.M

INSTRUCTIONS TO CANDIDATES

- SEE INSIDE

THIS PAPER CONSISTS OF 3 PRINTED PAGES

PLEASE TURN OVER

REGULAR - MAIN EXAM

MIC 412: BIOLOGY OF NEMATODES

STREAM: BSc. MICROBIOLOGY

DURATION: 3 Hours

INSTRUCTIONS TO CANDIDATES

- i. Answer ALL questions from section A and any **THREE** from section B.*
 - ii. Diagrams should be used whenever they serve to illustrate the answer.*
 - iii. Do not write on the question paper.*
- =====

SECTION A (24 MARKS)

Question One

- a) What are the main disadvantages of light microscopy in nematology (2 Marks)
- b) Outline the features of Phylum Nematoda (4 Marks)
- c) Citing two examples in each, highlight the characteristics of the two orders in Sub-class Spiruria (6 Marks)

Question Two

- a) How many times is the cuticle shed during nematodes life cycle? (1 Mark)
- b) Give an account of the reasons why morphological characteristics are still an important tool for the identification of nematodes (5 Marks)
- c) Describe the debilitating effects of parasitic nematodes (6 Marks)

SECTION B (36 MARKS)

Question Three

- a. Explain the term “Dioecious” (2 Marks)
- b. Root-knot nematodes (RKNs), *Meloidogyne* spp., are the most aggressive, damaging, and economically important group of plant parasitic nematodes infecting important crops worldwide. Discuss this statement with reference to;
 - i. Morphological identification (5 Marks)
 - ii. Isozyme patterning (5 Marks)

Question Four

Illustrate the characteristics of male and female nematodes (12 Marks)

Question Five

Describe the general life cycle of *Ascaris lumbricoides* (12 Marks)

Question Six

“Nematodes are ubiquitous organism on earth.” Discuss (12 Marks)

Question Seven

Discuss the role of nematodes in our life. (12 Marks)
