

SBL 401 E



ALUPE UNIVERSITY
COLLEGE

Bastion of Knowledge...

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**OFFICE OF THE DEPUTY PRINCIPAL
ACADEMICS, STUDENT AFFAIRS AND RESEARCH**

UNIVERSITY EXAMINATIONS

2021 /2022 ACADEMIC YEAR

FOURTH YEAR FIRST SEMESTER MAIN EXAMINATION

FOR THE DEGREE OF BACHELOR OF EDUCATION SCIENCE

COURSE CODE: SBL 401 E

COURSE TITLE: ENTOMOLOGY AND PARASITOLOGY

DATE: 26TH JANUARY 2022 TIME: 09.00 AM – 12.00 PM

INSTRUCTIONS TO CANDIDATES

- SEE INSIDE

THIS PAPER CONSISTS OF 3 PRINTED PAGES

PLEASE TURN OVER

REGULAR - MAIN EXAM

SBL 401 E: ENTOMOLOGY AND PARASITOLOGY

STREAM: B.EDS

DURATION: 3 Hours

INSTRUCTIONS TO CANDIDATES

- i. Answer **ALL** questions from section A and any **FOUR** from section B.
 - ii. Diagrams should be used whenever they serve to illustrate the answer.
 - iii. Do not write on the question paper.
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SECTION A (30 MARKS)

Question One

- a) Outline six characteristics used in the identification of insects. (3 Marks)
- b) Enumerate three types of specimen used for parasitological examination and state a relevant example for each. (3 Marks)
- c) Insects are known as “conquerors of the land”. Justify this statement. (5 Marks)
- d) Citing examples, distinguish between biological and mechanical vectors. (4 Marks)

Question Two

- a) What is tagmatisation in insects? (1 Mark)
- b) Describe the major symptoms associated with malaria fever. (3 Marks)
- c) Classify the head of insects based on their orientation with the mouth parts. (3 Marks)
- d) Highlight four distinctive characteristics of *Ascaris lumbricoides*. (4 Marks)
- e) Explain two asexual mode of reproduction in protozoa. (4 Marks)

SECTION B (40 MARKS)

Question Three

You have been appointed as the head of malaria control programme in Kenya.

To effectively implement the program activities you need to understand the malaria parasite.

Discuss the parasite *Plasmodium falciparum* transmission and its lifecycle. (10 Marks)

Question Four

a) Explain four sources of exposure to parasitic infections. (2 Marks)

b) Classify the pathogenic protozoa based on their mechanism of locomotion. (8 Marks)

Question Five

Discuss on African trypanosomiasis based on the following headings:-

a) Causative agent (2 Marks)

b) Vector (1 Mark)

c) Epidemiology (4 Marks)

d) Prevention (3 Marks)

Question Six

a) Explain the process of moulting in insects. (5 Marks)

b) Describe any five different forms of antenna found in insects (5 Marks)

Question Seven

Discuss the detrimental effects of parasites on their host (10 Marks)
