

SBL 401 E



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COLLEGE

*Bastion of Knowledge*

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# 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: 26<sup>TH</sup> JANUARY 2022 TIME: 09.00 AM – 12.00 PM**

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### 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**

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**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)

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