

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY SCHOOL OF BIOLOGICAL, PHYSICAL, MATHEMATICS AND ACTURIAL

SCIENCES

UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN BIOLOGICAL SCIENCES

3rdYEAR 1st SEMESTER 2022/2023 ACADEMIC YEAR

MAIN CAMPUS - REGULAR

COURSE CODE: COURSE TITLE: EXAM VENUE: DATE: 19/12/2022

SBB1315 PROTOZOOLOGY STREAM: (BSC) EXAM SESSION: 9.00-11.00AM

Instructions:

TIME: 2 HOURS

- 1. Answer ALL questions in Section A and Any two questions in Section B
- 2. Candidates are advised not to write on question paper
- **3.** Candidates must hand in their answer booklets to the invigilator while in the examination room

SECTION A: SHORT ANSWER QUESTIONS (30 MARKS)

1. In reference to the table below, differentiate between the two forms of Entamoeba

| histolytica | | (3 marks) |
|----------------|-------------------|-----------|
| Minuta/precyst | Magna/trophozoite | |
| | | |
| | | |
| | | |

- 2. List six negative consequences of protozoa infections to the human host (3 marks)
- 3. Name the species of protozoa parasites transmitted by the following insects

(3 marks)

Tsetse fly..... Sand flies..... Mosquitoes.....

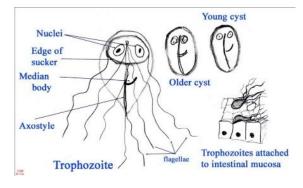
4. Describe any three pathologies associated with Entamoeba histolytic infection.

(3 marks)

- 5. Name the causal organism of Trichomoniasis and state four symptoms (3 marks)
- 6. State three types of barriers evolved by vertebrate hosts to reduce the risk of protozoa infections (3 marks)
- 7. Describe how you will prevent the spread of cryptosporidiosis in the Lake Victoria basin

(3 marks)

- 8. Outline three ways by which protozoa parasites infect their hosts (3 marks)
- 9. Name the species of parasitic protozoa represented in the diagram below, disease caused and drug used for treatment (3 marks)



| 3. List three characteristics that qualify some protozoa species as parasites | (3 marks) |
|---|-----------|
| 10. Using a suitable example distinguish between a parasite and a vector | (3 marks) |

SECTION B: ESSAY QUESTIONS (40 MARKS)

| 11. Describe various techniques used by referral hospitals to diagno | se protozoan infections |
|--|----------------------------|
| | (20 marks) |
| 12. Discuss factors that influence epidemiology of protozoa infectio | ons in western Kenya |
| | (20 marks) |
| 13. Discuss human immune responses to parasitic infections | (20 marks) |
| 14. Describe adaptive strategies used by protozoa parasites to enhan | nce survival in the hosts' |
| body | (20 marks) |