



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY
SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES
DEPARTMENT OF BIOLOGICAL SCIENCES
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE IN BIOLOGICAL SCIENCES
3rd YEAR FIRST SEMESTER 2016/2017 ACADEMIC YEAR
MAIN CAMPUS - REGULAR

COURSE CODE:	SBI 3317
COURSE TITLE:	PROTOZOOLOGY
EXAM VENUE:	STREAM: (BSC BIO)
DATE:	EXAM SESSION:
TIME: 2 HOURS	

Instructions:

- 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**
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SECTION A: ANSWER ALL QUESTIONS (30 MARKS)

1. A man arrived from West Africa since two months. He complained of having headaches, muscle and joint pains, fever, swollen lymph nodes all over the body, night insomnia, red painful swollen nodules on the skin, mood swings and difficulty in talking and walking.
 - a) Name the pathogens that you would suspect of causing this clinical presentation. (1 mark)
 - b) Explain how the man infected. (1 mark)
 - c) Explain how you can confirm your diagnosis. (1 mark)
2. Distinguish between amebic Ulcers and blantidial ulcers based on their causative agents, shape of lesions produced and level of digestive tract infected. (3 marks)
3. A third year student from JOOUST presented to the health clinic with altered mental status, headache, fever, neck stiffness, seizures and focal neurological signs. He gave a history of being a frequent swimmer.
 - a) Name the etiological agent for this clinical condition. (1 mark)
 - b) List any two clinical syndromes associated with etiological agent named in a above. (2 marks)
4. List any six distinguishing features of the life cycle stages of *Giardia lamblia*. (3 marks)
5. Distinguish *Babesia* and *Plasmodium* based on their vectors, natural reservoirs and erythrocytic multiplications. (3 marks)
6. State any six characteristics of oocysts of *Toxoplasma gondii*. (3 marks)
7. Giving specific examples, describe any six pathologies associated with *Trichomonas vaginalis* infection. (3 marks)
8. With specific examples of protozoan species, describe three methods that can be employed to control protozoans. (3 marks)
9. State any three qualities of successful protozoan parasites. (3 marks)
10. Explain the importance of protozoans having different life cycle stages. (3 marks)

SECTION B: ESSAY QUESTIONS (40 MARKS)

11. Write an essay on theleriosis with emphasis on their vectors, host, morphological features of the causative agent and clinical presentation. (20 marks).
12. "Clinical diagnosis of protozoans is based on their shapes, sizes, intracellular organelles, clinical symptoms and their ecological niches". Discuss this statement. (20 marks)
13. Write an essay on pathogenesis of Leishmaniasis. (20 marks)
14. Describe the economic importance of protozoans. (20 marks)