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**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY**

**SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES**

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE (BIOLOGICAL SCIENCES)**

**3rd YEAR 1st SEMESTER 2016/2017 ACADEMIC YEAR**

**MAIN CAMPUS - REGULAR**

**COURSE CODE: SBH 3318**

**COURSE TITLE: PROTOZOOLOGY**

**EXAM VENUE: CHEM LAB STREAM: (BIO)**

**DATE: 22/04/16 EXAM SESSION: 2.00 – 4.00 PM**

**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**

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

1. State **three**distinguishing features of Trichomonads. (3 marks)
2. Describe any **three** extra-intestinal pathological manifestations of amoebiasis in the human host. (3 marks)
3. Explain any **three** attributes that make ticks suitable intermediate hosts for protozoans. Give **two** examples of the protozoans for which ticks are intermediate hosts. (3 marks)
4. Distinguish between visceral and cutaneous leishmaniasis. (3 marks)
5. Give the distinguishing features of morphological stages of *Giardia intestinilis.*

(3 marks)

1. Outline the differences in the life cycle stages of *Toxoplasma gondii*. (3 marks)
2. State the etiological agent and three clinical symptoms of Theileriosis. (3 marks)
3. Outline the morphological features of Coccidia. (3 marks)
4. Name any **two**trypanosome species. Distinguishthe species based on ecological zones, vectors and the disease associated with them. (3 marks)
5. State any **three** etiological agents of malaria in Africa and how they can be controlled. (3 marks)

**SECTION B:ANSWER ANY TWO QUESTIONS (40 MARKS)**

1. Explain the various types of host damage caused by parasitic infections and give specific examples in each case. (20 marks)
2. With specific examples describe how a parasites ecological niche influences the choice of specimens during parasite diagnosis. (20 marks)
3. Discuss the qualities of a successful protozoan parasite. (20 marks)
4. Write an essay on Babeosis with emphasis on vectors, morphological and clinical features. (20 marks)