



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY**  
**SCHOOL OF BIOLOGICAL, PHYSICAL, MATHEMATICS AND ACTUARIAL SCIENCES**  
**UNIVERSITY SPECIAL EXAMINATIONS FOR THE DEGREE OF BACHELOR OF**  
**BIOLOGICAL SCIENCES**

**SECOND YEAR FIRST SEMESTER ACADEMIC YEAR 2020/2021**

**MAIN CAMPUS - REGULAR**

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<b>COURSE CODE:</b>	<b>SBI 3218</b>
<b>COURSE TITLE:</b>	<b>PROTOZOOLOGY</b>
<b>EXAM VENUE:</b>	<b>STREAM: (BIO)</b>
<b>DATE:</b>	<b>EXAM SESSION:</b>
<b>TIME:</b>	

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**Instructions**

- 1. Answer ALL questions in Section A (compulsory) and ANY TWO questions in Section B**
  - 2. Candidates are advised not to write on the question paper**
  - 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**
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### **SECTION A: SHORT ANSWER QUESTIONS (30 MARKS)**

1. State three differences between mucocutaneous and visceral leishmaniasis. (3 marks)
2. Give six morphological characteristics of *Toxoplasma gondii* oocyst. (3 marks)
3. State three clinical syndromes associated with genus *Acanthamoeba*. (3 marks)
4. Give examples of six types of parasites. (3 marks)
5. Explain the three types of symbiotic relationships and give examples. (3 marks)
6. Outline six pathologies associated with *Trichomonas vaginalis*. (3 marks)
7. Explain pre-erythrocytic schizogony in plasmodium parasites. (3 marks)
8. State six morphological characteristics of *Babesia* trophozoites. (3 marks)
9. Explain three extra-intestinal pathologies associated with *Entamoeba histolytica*. (3 marks)
10. Explain how you can control and prevent infection with protozoans. (3 marks)

### **SECTION B: ESSAY QUESTIONS (40 MARKS)**

11. Describe the epidemiology, morphology, lifecycle, diagnosis and control of trypanosomes. (20 marks)
12. Write an essay about *Giardia lamblia* focusing on its epidemiology, morphology, pathology and control. (20 marks)
13. Describe the pathogenesis of parasitic protozoa frequently found in immune-compromized individuals. (20 marks)
14. "Ecological niche of parasite determines the type sample to be collected for diagnosis". Discuss this statement giving examples. (20 marks)