

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

SECOND YEAR EXAMINATION FOR THE AWARD OF DEGREE  
OF BACHELOR OF SCIENCE (BIOCHEMISTRY)

BMED 233: PROTOZOOLOGY

STREAMS: BIOC & BMED

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 3/8/2016

8.30 A.M. – 10.30 A.M.

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INSTRUCTIONS: ANSWER QUESTION ONE AND TWO OTHER QUESTIONS

**Question One (30 Marks)**

- (a) Describe the modern Protist classification scheme proposed by the International Society of Protistologists. [8 marks]
- (b) Protozoa utilize different mechanisms for their movement. Discuss the major motility types in Alveolata group of protists. [5 marks]
- (c) Describe the etiologies and transmission of cryptosporidiosis. [5 marks]
- (d) Discuss Polyamine metabolism in trypanosomatids, highlighting potential target for chemotherapy. [7 marks]
- (e) Malaria is a deadly co-factor for HIV/AIDS. Based on the virulence of two pathogens, discuss this statement. [5 marks]

**Question Two (20 Marks)**

- (a) Explain how parasitic protozoa evade host immune responses. [10 marks]
- (b) With the aid of a labeled diagram, describe different morphological forms of kinetoplastids. [10 marks]

**Question Three (20 Marks)**

- (a) Discuss the pathogenicity and virulence of *E. histolytica*. [7 marks]
- (b) How is Trichomoniasis diagnosed and treated? [6 marks]
- (c) Explain the non-clearance of Trypanosome parasite despite massive immune response mounted by an infected individual. [7 marks]

**Question Four (20 Marks)**

- (a) Discuss the economic importance of Malaria in Kenya. [4 marks]
  - (b) Distinguish between lowland and highland malaria. [2 marks]
  - (c) With the aid of a diagram, describe the Plasmodium life cycle. [14 marks]
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