



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2017/2018
FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE (ENVIRONMENTAL HEALTH)

HEH 216: PRINCIPLES OF ENVIRONMENTAL PARASITOLOGY

DATE: Wednesday 22nd November 2017

TIME: 8.00a.m-10.00a.m

INSTRUCTIONS:

SECTION A: Answer ALL questions

1. (a) With the aid of a well labelled diagram illustrate the *Entamoeba histolytica* cyst and trophozoite. (4marks)

- (b) Briefly describe the prevention measures against *Taenia Solium* infection in human. (4marks)

- (c) State the first symptom of schistosomiasis and describe the distinguishing characteristics during diagnosis of the infection of the following species of the parasites in the laboratory.
 - (i) *Schistosoma haematobium*
 - (ii) *Schistosoma mansoni*
 - (iii) *Schistosoma japonicum* (4marks)

- (d) Explain the condition chagoma in Chaga's disease and outline three clinical features of the acute disease. (4marks)

(e) Explain the following

(i) Two major differences in the life cycles of the parasites *Trypanosoma brucei rhodesiense* and *Trypanosoma brucei gambiense* (2marks)

(ii) two prevention methods against the infection (2marks)

SECTION B: Answer question 2 and any other two

2. Discuss the lifecycle and pathology of *Strongyloides stercoralis* (20marks)

3. Discuss Leishmania disease under following topic (15marks)

(i) Epidemiology and pathology

(ii) Prevention and control

4. Describe the following

(a) Five ways through which direct transmission of protozoan parasites can occur.

(5marks)

(b) Discuss why parasitic infections are prevalent in tropical. Africa (10marks)

5. Describe the disease caused by *Echinococcus granulosus* under the following topics

(a) Mode of transmission

(b) Epidemiology

(c) Prevention and Control (15marks)