



**MURANGA UNIVERSITY COLLEGE**  
*(A constituent College of Jomo Kenyatta University of Agriculture and Technology.)*

**DIPLOMA I APPLIED BIOLOGY**

**SCHOOL OF PURE AND APPLIED SCIENCES**

**CLASS AS/BIO/14D**

**COURSE CODE. ASB 1209**

**PARASITOLOGY.**

**DATE: NOV 2015**

**TIME:**

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***INSTRUCTIONS TO CANDIDATES.***

This paper consists of *two* Sections, A and B. Answer ALL Questions in Section A and any THREE Questions from Section B. Each Question in A carries **4 marks** while each Question in section B carries 20 marks.

**SECTION A [40 MARKS]**

1. Define the following terms

a. Parasitism [2marks]

b. Host [2marks.]

2. Outline the preparation of a wet faecal mount to observe amoeba motility. [4marks]

3 a. State two mode of transmission of *Toxoplasma gondii* [2marks]

b. Give two important factors necessary for malaria transmission [2marks]

4. Distinguish between the following.

a. Definitive and intermediate host [2marks]

- b. Biological and mechanical vector [2marks]
5. Write short notes the following,
- a. Paratenic host [2marks]
- b. Anthroponoses infection [ 2marks]
6. Outline on the control measures for various parasitological diseases citing examples in each case. [4marks]
7. Outline on four ways of the host defence mechanisms towards parasitic infection. [4marks].
8. Explain the laboratory diagnosis of Naegleria fowleri [4marks].
9. Draw a well labeled structure of G.lamblia [4marks].
10. Differentiate between the cysts of Entamoeba histolytic a from Entamoeba coli. [ 4marks].

**SECTION B. [60marks]**

11. Describe how parasites are metabolically dependant on their hosts for;
- a, Development
- b, Nutrition and Enzymes
- c, Reproduction
- Give examples in each case [20marks].
12. Giving specific examples, explain on the effects of the parasite on the host. [20marks].
13. a. Describe the principle and procedure of Formol Ether concentration technique. [12marks].
- b. Discuss prophylaxis of malaria infection. [8marks].
14. Discuss visceral Leishmaniasis under the following headings;
- a. Aetiology [2marks]
- b. Epidemiology [4marks]
- c. Life cycle [ 7marks]
- d. Pathogenesis [7marks]
15. Discuss malaria diagnosis by thick and thin smears using Giemsa stain [20marks]