

**NATIONAL OPEN UNIVERSITY OF NIGERIA**

**PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI - ABUJA**

**FACULTY OF SCIENCE**

**APRIL, 2019 EXAMINATION**

**BIO 310 PROTOZOOLOGY - 2 UNITS**

**INSTRUCTION: Answer Question ONE and any other THREE Questions**

**TIME ALLOWED - 2 HOURS**

1a. Explain the terms:

1. Definitive host
2. Intermediate host
3. Reservoir host
4. Vector **(4 marks)**

b. What are the general characteristics of the Apicomplexa? **(4 marks)**

c. Differentiate between a trophozoite and a sporozoite **(2 marks)**

d. Give the other name of each of the following diseases:

1. African trypanosomiasis
2. American trypanosomiasis
3. Kala azar **(3 marks)**

e. What are the causative agents of:

1. Malaria
2. African trypanosomiasis
3. American trypanosomiasis? **(3marks)**

f. With the aid of a diagram, describe the morphology of the trypanosome (9 marks)

2a. Write short notes on the symptoms of:

1. African trypanosomiasis **(7 ½ marks)**
2. Malaria **(7 ½ marks)**

3. Describe (i) The morphology **(12 marks)** and (ii) the life cycle of *Giardia*

*lamblia* **(3 marks)**

4. How is malaria transmitted from person to person? **(15 marks)**

5. For each of the following parasites, state its **definitive host**, **location in the definitive host** and **vector** **or method of transmission**

i. *Babesia bigemina*

*ii. Babesia microti*

*iii. Entamoeba coli*

*iv. Entamoeba gingivalis*

*v. Entamoeba histolytica*

*vi. Giardia lamblia*

*vii. Leishmania donovani*

*viii. Toxoplasma gondii*

*ix. Trychomonas vaginalis*

*x. Trypanosoma brucei*

**1½ mark x 10 = 15 marks**