



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI ABUJA**  
**FACULTY OF SCIENCE**  
**Department of Biological Sciences**  
**2023\_1 POP EXAMINATION**

**COURSE CODE: BIO 310**

**COURSE TITLE: PROTOZOOLOGY**

**CREDIT: 2 UNITS**

**TIME ALLOWED: 2 HOURS**

**INSTRUCTION: ANSWER QUESTIONS 1 AND ANY OTHER TWO QUESTIONS.**

1a. Define the following terms:

- i. Host **(1mark)**;
- ii. Definitive host **(1mark)**;
- iii. Intermediate host **(1mark)**;
- iv. Reservoir host **(1mark)**;
- v. Vector **(1mark)**.

b. Mention two apicomplexan parasites that are of medical importance **(4marks)**

c. Name five organelles found in the structure of protozoans **(5marks)**

d. Describe the morphology of the trypanosome **(6marks)**

e. Outline five general characteristics of the phylum Apicomplexa **(10marks)**

2a. i. Outline the major parasite responsible for amebic dysentery; **(1mark)**

ii. What are the acute symptoms of amebic dysentery? **(1mark)**

iii. What are the treatments for amebic dysentery? **(1mark)**

b. Identify five species of Entamoeba that infects man and their location in the body of man or of other vertebrates **(5marks)**

c. Write a comprehensive note on the symptoms of African trypanosomiasis **(12 marks)**

3a. Mention the disease caused by Trichomonas vaginalis **(1mark)**

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

c. Discuss the symptoms and treatments of the disease caused by Trichomonas vaginalis? **(5marks)**

d. Briefly, describe the epidemiology, morphology and the life cycle of Trichomonas vaginalis **(12marks)**

- 4a. List five blood protozoa that are of major biological/medical significance (5marks).
- b. Write a comprehensive note on the symptoms of Malaria (15 marks)
- 5a. Describe the characteristics of the following Plasmodium species:
- i. *Plasmodium falciparum* (9marks)
  - ii. *Plasmodium vivax* (6marks)
- b. State five characteristics of Mosquito that makes it an efficient vector of human malaria parasite (5marks)