



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI ABUJA**  
**FACULTY OF SCIENCE**  
**Department of Pure and Applied Sciences**  
**2021\_2 EXAMINATION**

**COURSE CODE: BIO 310**

**COURSE TITLE: PROTOZOOLOGY**

**CREDIT: 2 UNITS**

**TIME ALLOWED: 2 HOURS**

**INSTRUCTION: ANSWER QUESTIONS 1 AND ANY OTHER THREE QUESTIONS**

- (1)a. Briefly explain a 'host' (2marks)  
b). Outline the difference between trophozoite and sporozoite. (2marks)  
c). Explain briefly the disease Isospora *belli* (5 marks)  
d). Compare the two distinctive subcellular organelles of Apicomplexa parasites (6marks)  
e). Elucidate on the various mode of movement of protozoans giving specific examples. (10marks)
- (2)a. State the five major protozoans of biological/medical importance. (5 marks)  
b). Briefly outline the vectors of human malaria. (10 marks)
- (3) a. List the four plasmodium species responsible for human malaria. (4 marks)  
b). Highlight the four special features of *Plasmodium ovale*. (4 marks)  
c). Enumerate the clinical symptoms of the sleeping sickness. (7 marks)
- 4) a. briefly explain the Epidemiology of *Trypanosomes*. (4 marks)  
b. Highlight the step involved in the life cycle of *Toxoplasma gondii*. (11 marks)
- 5) Highlight the special features in the life cycle of the species of Plasmodium that cause malaria (15marks)