

## NATIONAL OPEN UNIVERSITY OF NIGERIA PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI ABUJA

## **FACULTY OF SCIENCES**

## Department of Pure and Applied Sciences OCTOBER/NOVEMBER, 2019 EXAMINATION

**COURSE CODE: BIO 310** 

**COURSE TITLE: PROTOZOOLOGY** 

**CREDIT: 2 UNITS** 

**TIME ALLOWED: 2 HOURS** 

INSTRUCTION: ANSWER QUESTIONS 1 AND ANY OTHER THREE.

1a. Explain the terms:

- (i) Definitive host
- (ii) Intermediate host
- (iii) Reservoir host
- (iv) 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:
  - (i) African trypanosomiasis
  - (ii) American trypanosomiasis
  - (iii) Kala azar (3 marks)
- e. What are the causative agents of:
  - (i) Malaria
  - (ii) African trypanosomiasis
  - (iii) 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:
  - I. African trypanosomiasis (7 ½ marks) and
  - II. Malaria (7 ½ marks)
- 3. Describe (i) The morphology (12 marks) and (ii) the life cycle of *Giardia lamblia* (3 marks)
- 4. Discuss how malaria is 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

 $1\frac{1}{2}$  mark x 10 = 15 marks