



NATIONAL OPEN UNIVERSITY OF NIGERIA  
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI -  
ABUJA  
FACULTY OF SCIENCE  
Department of Pure and Applied Sciences  
2023\_2 EXAMINATIONS

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BIO 411: PARASITOLOGY - 2 UNITS

INSTRUCTION: ANSWER QUESTIONS 1 AND ANY OTHER THREE.  
TIME ALLOWED - 2 HOURS

1. (a) For each of the following disease conditions, mention the vector/intermediate host; and the location of the parasite in the host:  
(i) Kala azar (ii) Bilharziasis (iii) Sleeping sickness (iv) River blindness (v) Elephantiasis (10 marks)  
  
(b) Give the scientific names of the parasites listed below.  
(i) Dwarf tapeworm (ii) Broad fish tapeworm (iii) Whipworm (iv) Common roundworm (v) Eye worm (vi) Blood fluke (vii) Liver fluke (viii) Lung fluke (ix) Thorny headed worm (x) Leech (10 marks)  
  
(c) List five features of parasitological interest in the nematode, *Ascaris lumbricoides*. (5 marks)
2. (a) How is the tapeworm adapted to its parasitic mode of life? (5 marks)  
(b) Briefly describe the life cycle of the tapeworm, *Taenia saginata* (10 marks)
3. (a) What is Epidemiology? (2 marks)  
(b) Enumerate the aims of Epidemiology (7 marks)  
(c) By means of a **diagramme only**, describe the disease/epidemiologic triangle. (6 marks)
4. (a) What are the characteristics of (i) Acanthocephalans (5 marks)  
(ii) Trematodes. (6 Marks)  
(b) Mention the diagnostic feature of (i) Egg of *Schistosoma mansoni* (ii) Egg of *Schistosoma haematobium* (iii) Fertilized Egg of *Ascaris lumbricoides* (iv) Egg of *Trichuris trichiura* .(1 mark each = 4 marks)
5. (a) Explain the following terms: (i) Prevalence (3 marks) (ii) DALYs (3 marks)  
  
(b) A final year student of the Department of Biology in a Private University obtained the following data after examining blood samples for malaria infection in Kadara primary health centre.