

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

## Department of Biological Sciences 2022\_1 EXAMINATION

**COURSE CODE: BIO411** 

**COURSE TITLE: PARASITOLOGY** 

**CREDIT: 2 UNITS** 

**TIME ALLOWED: 2 HOURS** 

INSTRUCTION: ANSWER NUMBER ONE (1) AND ANY OTHER TWO (2)

**QUESTIONS** 

1(a) Why are hosts important to parasites? (2 marks)

(b) Classify parasites based on (i) Site of predilection and (ii) duration of degree of dependence (4 marks)

- (c) List the demographic factors for consideration in epidemiology (4 marks)
- (d) Give a detailed description of the scope of parasitology (4 marks)
- (e) In a tabular form distinguish between Parasitology and Epidemiology (6 marks)
- (f) Discuss the life cycle of a human *Schistosoma* species (10 marks)
- 2(a) Outline any eight aims of epidemiology (8 marks)
- (b) Describe the two categories of animal associations as exhibited by living organisms. (6mks)
- (c) In a tabular form differentiate the characteristic features of trematodes and cestodes. (6 marks)
- 3(a) Explain the terms commonly used to define host selection (3 marks)
- (b) Outline any eight branches of Parasitology. (5 marks)
- (c) Name the causative agent and the insect vector of each of the following diseases (i) River blindness (ii) Calabar swelling (iii) Malaria (iv) Sleeping sickness (v) Guineaworm disease (vi) Elephantiasis (12 marks)
- 4. Write short notes on the characteristic features of any four of the following:
  - (i) Acanthocephala
  - (ii) Nematoda
  - (iii) Cestoda
  - (iv) Trematoda
  - (v) Protozoa

- 5(a) As a student of parasitology, make a list of one possible disease and one vector or intermediate host of interest in the following communities:
  - (i) A community that cherishes under cooked pork (2 marks)
- (ii) A community that depends on pond water for drinking and washing (2 marks)
  - (iii) A community in which irrigation and rice farming is the mainstay (2 marks)
  - (b) What are (i) Monogenetic (3 marks) (ii) Digenetic trematodes (2 marks)
  - (c) Write short notes on the following types of hosts:
    - (i) Definitive host (3 marks)
    - (ii) Intermediate host (3 marks)
    - (iii) Paratenic host. (3 marks)