

NATIONAL OPEN UNIVERSITY OF NIGERIA 14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS SEPTEMBER/OCTOBER 2015 EXAMINATION

SCHOOL OF SCIENCE AND TECHNOLOGY

COURSE CODE: BIO 411

COURSE TITLE: PARASITOLOGY

TIME ALLOWED: 2 HOURS

INSTRUCTION: ANSWER QUESTION 1 AND ANY OTHER THREE QUESTIONS

1. (a) Distinguish very clearly between the following pair of terms:

(i.) Parasitology and Epidemiology (5 marks)

(b) List any **eight** branches of Parasitology (4 marks)

(c). Briefly explain any **five** of the branches listed above (10 marks)

(d). What is a host? (2 marks)

(e). Give **one** named example of the following groups of parasites: Protozoa, nematodes Acanthocephalans, Arthropods (4 marks)

2. (a). With the aid of a schematic diagram, briefly discuss the transmission of parasitic disease. (10 marks)

(b). List **ten** aims of epidemiology. (5 marks)

3. Briefly explain the following:

(i) Disability Adjusted Life Years (DALYs) (5 marks)(ii) Loose associations (10 marks)

4. (a). Enumerate **four categories** of parasitism and give two **examples** each category.

(8 marks)

(b). Distinguish very clearly between host-specificity and host selection in host-parasite relationship, and discuss the terms commonly used to define host selection.

(7 marks)

- 5. Discuss the life cycle of *Plasmodium*spp using a schematic diagram. (15 marks)
- 6. (a). What is the major distinguishing feature of the life cycle of ancanthocephalans that differentiate them from leeches and arthropods? (5 marks)
 - (b). Differentiate the characteristic biological features of Trematodes and Cestodes (5 marks)
 - (c). Using a schematic diagram, discuss the life cycle of *Polymorphus*spp. (5 marks)