

## NATIONAL OPEN UNIVERSITY OF NIGERIA 14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS MARCH/APRIL 2016 EXAMINATION

## SCHOOL OF SCIENCE AND TECHNOLOGY

COURSE CODE: BIO414

COURSE TITLE: APPLIED ENTOMOLOGY

TIME ALLOWED: 2 HOURS

INSTRUCTION: ANSWER QUESTION 1 (COMPULSORY) AND ANY OTHER THREE QUESTIONS.

- a. State the factors responsible for the success / extensive distribution of insects (5marks)
- b. In outline form, give a general classification of insects (termites and mosquitoes) **(10marks)**
- 2. a. State the general characteristics of insects that you know (5marks)
- b. Give a succinct economic classification of insects (10marks)
- 3. a. Explain what is meant by a pest and chemical pest control and pesticides (3marks)
  - b. Outline **ten** ideal qualities of an insecticide **(10marks)**
- c. Based on organisms or pest organism against which the compounds are used, mention four different types of pesticides **(2marks)**
- 4. a. What are the important advancements reckoned with in the study of insecticide metabolism? **(6marks)**
- b. Briefly explain the properties of pesticides which determine their behavior and fate **(4marks)** 
  - c. Explain how Pesticides enters into the atmosphere (5marks)
  - 5. a. What is the term Resistance **(5marks)**
  - b. Give examples of resistance (5marks)
  - c. Explain five mechanisms of resistance that you know (5marks)

6.a. Give examples of predator-prey and host-parasitoid relationships amongst insects **(5marks)** 

- b. Mention the specific orders of insects that are involved in these relationships **(5marks)**
- c. Explain the techniques used by insect predators and parasitoids (5marks)