



**NATIONAL OPEN UNIVERSITY OF NIGERIA**

**National Open University Of Nigeria  
Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja  
Faculty of Science**

**OCTOBER/NOVEMBER 2016 EXAMINATION**

**COURSE CODE: BIO 414**

**COURSE TITLE: APPLIED ENTOMOLOGY**

**TIME ALLOWED: 2HOURS**

**INSTRUCTION: QUESTION ONE IS COMPULSORY AND ANY OTHER THREE QUESTIONS.**

1. a. Give a concise classification of insects based on their economic importance. Mention at least

**one example** in each classification **(15marks)**

b. Honey bee is known to be a very good example of an economic insect. Briefly describe its life

cycle **(10marks)**

2. a. Mention **ten** parasitic mites of mammals **(10marks)**

b. Enumerate **five** mites of named invertebrate organisms **(5marks)**

3. a. The classification of an insect as a pest is a subjective one, based on its potential damage to

human purposes. Explain **(8marks)**.

b. State **four reasons** why some insects are considered as pest? **(4marks)**.

- c. Mention **three** insects that are considered as pests **(3marks)**.
4. a. Explain what is meant by a pest, chemical pest control and pesticides**(3marks)**
- b. Enumerate **ten** ideal qualities of an insecticide **(10marks)**
- c. Based on organisms or pest organisms against which the compounds are used, mention four different types of pesticides **(2marks)**
5. 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)**
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 as predators and parasitoids **(5marks)**