

## NATIONAL OPEN UNIVERSITY OF NIGERIA Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja Faculty of Science DEPARTMENT OF BIOLOGICAL SCIENCES 2024 1 EXAMINATION

COURSE CODE: BIO 414

COURSE TITLE: APPLIED ENTOMOLOGY

CREDIT UNIT: 3 UNITS TIME ALLOWED: 3 HOURS

INSTRUCTION: ANSWER QUESTION ONE AND ANY THREE OTHERS.

QI

(3marks) a. Define the following terms; Nomenclature, i. Classification ii. Taxonomy iii. (3marks) b. Justify why insects are successful on land. c. Enumerate three (3) biological methods tools or components of Integrated Pest (3marks) Management d. Write on any two (2) of the following integrated pest management (IPM) approaches. (7marks) Time applications correctly i. Mix and apply carefully ii. Alternate different insecticide classes iii. e. Describe the roles of any two (2) of the followings in bee hive; (9marks) Worker i. Queen ii. ili. Drone a. Enumerate the ornamental/entertainment usefulness of insects. (3marks)

Q2

a. Enumerate the ornamental/entertainment userulness of insects. (3marks)
b. With appropriate example(s), describe any three (3) of the listed families of economic insects; (6marks)
i. Family Varroidae
ii. Family Tarsonemidae
iii. Family Pyemotidae
iv. Family Trombidiidae
c. Pesticides exhibit different behaviours in the environment, Justify. (8marks)

(8marks)

d. Explain any four types of plant resistance (genetic resistance) in insect