

FEDERAL UNIVERSITY OF TECHNOLOGY, OWERRI
SCHOOL OF AGRICULTURE AND AGRICULTURAL TECHNOLOGY
DEPARTMENT OF CROP SCIENCE AND TECHNOLOGY
2014/2015 RAIN SEMESTER EXAMINATIONS

COURSE TITLE: AGRICULTURAL ENTOMOLOGY

COURSE CODE: CST 508

TIME ALLOWED: 2 ½ HOURS

INSTRUCTION: ANSWER ONLY FIVE (5) QUESTIONS

1. (a) The selection of application technique for insecticides depend on a number of factors. Briefly describe any five (5) of such factors.
(b) Enumerate three (3) different types of spray application techniques you know.
(c) Concisely state five (5) advantages and five (5) disadvantages of granular pesticides over water miscible liquids and dusts.

2. (a) What is pesticide formulation? Outline the two basic components of a formulated pesticide.
(b) With examples, define and differentiate between these types of formulations:
(i) Aerosols (ii) Emulsifiable Concentrates (EC) (iii) Flowable or Sprayable Suspensions (iv) Slow Release or Encapsulated Insecticides (v) Ultra Low Volume Concentrates (ULV)
(c) Despite the ease of formulation, handling and application, dusts are the least effective and the least economical of the pesticide formulations. Give three (3) reasons to support this assertion.

3. Cultural control and use of resistant varieties play very significant roles in pest management. Briefly discuss the different approaches to these methods so as to achieve pest control in crop production.

4. Give three (3) merits and demerits of biological control as part of pest management strategy.

5. (a) Discuss the (i) natural and (ii) legislative control of insect pests
(b) Define the term IPM (Integrated Pest Management)
(c) Appraise the roles of IPM in pest management

6. (a) Name four (4) Orders of insects (with one example) that are of economic importance to farmers in your area.
(b) Draw the structure of the sampled insect in each Order.
(c) List at least five (5) characteristics of insects in each Order that aid entomologists in the identification of the insect sample.