



NATIONAL OPEN UNIVERSITY OF NIGERIA  
FACULTY OF AGRICULTURAL SCIENCES  
DEPARTMENT OF CROP AND SOIL SCIENCE  
2024 1 EXAMINATION

**COURSE TITLE: PRINCIPLES OF CROP PROTECTION (2 CU)**

**COURSE CODE: CRP 303**

**TOTAL SCORE: 70 MARKS**

**INSTRUCTION: Answer 3 questions in all**

**Question 1 is compulsory (30 marks) and any other TWO questions (20 marks each)**

**TIME ALLOWED: 2 ½ Hours**

- 1a. Elucidate with examples, the three (3) categories of damages caused by insect pests. **13marks**
- b. What do you understand by the term “mesobiotic causes” of disease? **8marks**
- c. List the method of weed control in Preventive Weed Management System. **9marks**
- 2a. Evaluate “Millet head miner (*Helioceilus albipunctella* de Joannis)” as an insect pest of cereals in Nigeria. **14marks**
- b. Write very short notes on the following as symptoms of disease;
- i. Sclerotia, iii. Necrosis, iii. Anthracnose **6marks**
- 3a. Discuss “*Contarinia coquillte*” on the following headings;
- i. common name **1marks**
- ii. morphology **2marks**
- iii. mode of spread **3marks**
- iv. major and minor hosts **1marks**
- v. part of plant affected **1marks**
- vi. control **6marks**
- b. List the cultural control methods of *Oryza sativa* and *O. globerrima* white stem borer (*maliarpha separatella*). **6marks**
- 4a. Discuss the abiotic factors that cause diseases/disorders in plants. **14marks**
- b. Enumerate the damages caused by storage pests. **6marks**