



**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 (*Helioceltis 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 coquilte*” 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**