



**NATIONAL OPEN UNIVERSITY OF NIGERIA  
FACULTY OF AGRICULTURAL SCIENCES  
DEPARTMENT OF CROP AND SOIL SCIENCES**

**EXAMINATION: POP EXAMINATION 2021\_2**

**COURSE TITLE: PLANT PEST AND DISEASE MANAGEMENT (2CU)**

**COURSE CODE: CRP513**

**TOTAL SCORE: 70 MARKS**

**TIME ALLOWED: 2hours**

**INSTRUCTION: Answer THREE Questions in All. Question 1 is compulsory (30marks) and any two questions (20 marks each)**

1

- a. i. Define plant disease. (3 marks)  
ii. What do you understand by the word pathogen. (3 marks)  
iii. Name any five (5) common plant disease pathogens. (5 marks)
- b. i. Identity three nonliving disease causing factors. (3 marks)
- c. ii. List three (3) factors must coexist for plant disease to occur. (3 marks)
- d. iii. Identity five (5) vectors of virus diseases of plants. (5 marks)
- e. (c). State briefly how (i) temperature and (ii) light intensity affects plant disease. (8 marks)

2. Write short notes on;

- a. Any two (2) of the following cultural methods of plant pest/ disease control given below; (10marks)
  - (i). Optimal growing conditions
  - (ii). Time of sowing.
  - (iii). Inter cropping
  - (iv). Crop rotation
- b. Any two (2) of the following biological methods of plant pest control; (10marks)
  - (i). Genetic manipulation
  - (ii). Predators.
  - (iii). Pathogens
  - (iv). Insect population monitoring

3.

- a. (a). Use the disease triangle diagram to discuss the conditions for disease development (10 marks).
- b. (b). Discuss the concept of integrated plant disease management (10 marks)

4.

a. Briefly explain the any two of following modes of action of chemical insecticide;

- (i). Systemic poison
- (ii). Stomach poison
- (iii). Contact poison

b.

- (i). What do you understand by "past application effects of chemical pesticides? "
- (ii). Briefly explain any three (3) post application effects of chemical pesticides (Total 20 marks).

CRP