



CRAWFORD UNIVERSITY

FAITH CITY, IGBESA, OGUN STATE

2015/2016 HARMATTAN SEMESTER EXAMINATIONS

COLLEGE: NATURAL AND APPLIED SCIENCES

DEPARTMENT: BIOLOGICAL SCIENCES

PROGRAMME: MICROBIOLOGY

COURSE CODE: MCB 407

COURSE TITLE: PLANT PATHOLOGY

COURSE UNIT: 3

TIME ALLOWED: 3HOURS

INSTRUCTIONS: Answer question 1 and any other 4 (FOUR) questions (All questions

Carry equal marks: 20Mrks each)

1. a. Write short notes on the following biological terms:
 - i) Disease forecasting ii) Pathogen iii) Host resistant iv) Disease triangle v) Epiphytotics
 - vi) Host resistance vii) Canker viii) Necrosis ix) Mildews x) Phytopathology
 - b. List 10 contents of a field kit for plant disease sample collection
 - c. On what principles are plant disease forecasts based?
2. a. How will you define pathogenesis? Give a detailed account of the phenomenon of infection.
 - b. Give a brief description of the effect of infection on host (plant) physiology.
 - c. List the main objectives of phytopathology.
3. a. What do you understand by plant disease?
 - b. Classify symptoms caused by plant pathogens into two categories.
 - c. Based on the categories in (b) above, classify the following symptoms into two groups and give a brief account of any five of them

i) Mildews ii) Damping off iii) Necrosis iv) Blight v) Rusts vi) Scabs vii) Stripes or streaks viii) Witches broom ix) Smuts x) Canker xi) Blight.

4. a. List five criteria used in classifying plant diseases.
b. Write an extensive note on any three of the criteria listed in 4a above.
c. What are the various morphological and biochemical defence mechanisms. Discuss them with suitable examples.
5. a. Describe the main symptoms, nature of causal organism, predisposing factors and control of citrus canker.
b. Name the causative organism of the early blight of potato
c. Name two important diseases of sugarcane.
d. Which micro organism causes crown gall of apple?
6. a. Write an essay on Epiphytotic and causes.
b. Discuss four prophylactic measures that are used in controlling plant diseases.
7. a. 'Knowledge of the biology of a pathogen is of great importance in devising measures of controlling it'. Comment on this statement.
b. Describe the symptoms, nature of causal organisms, disease cycles and disease control measures of any three of the following plant diseases.
 - i. Powdery mildew
 - ii. Loose smut of wheat
 - iii. Apple scab
 - iv. Any disease of sugarcane
 - v. Leaf curl of papaya