

THE OPEN UNIVERSITY OF SRI LANKA  
B.Sc. DEGREE PROGRAMME - BOTANY - LEVEL 05  
FINAL EXAMINATION - 2008/2009  
BTU3110 - PLANT PATHOLOGY II



060

DURATION : TWO AND A HALF (2 ½) HOURS

DATE : 15<sup>th</sup> July 2009

TIME : 10.00 a.m. - 12.30 p.m.

ANSWER ANY FOUR (04) OF THE FOLLOWING QUESTIONS.

ILLUSTRATE YOUR ANSWERS WITH FULLY LABELLED DIAGRAMS WHEREVER NECESSARY.

01.
  - a) What are the three (03) main groups of pathogen-secreted chemicals which assist host plant attack?
  - b) Briefly describe each of these groups of chemicals and their effect in disease development.
  
02. Compare the following:
  - a) Monocyclic diseases and polycyclic diseases.
  - b) Horizontal disease resistance and vertical disease resistance.
  
03.
  - a) What is an epidemic?
  - b) What components affect the development of an epidemic and what factors influence each of these components?
  - c) Describe the different methods available to measure diseases.
  
04. Write short notes on:
  - a) Soil fungistasis.
  - b) Tyloses and their role in pathogenesis.
  - c) Chemical control of post-harvest diseases.

05. a) What is hypersensitive response?  
b) How is this response genetically explained?  
c) Outline the mechanism which is thought to take place during this process.
06. a) What mechanisms are exhibited by plant pathogens which show resistance to fungicides?  
b) Why were plant pathogens found to develop resistance more easily to systemic fungicides than protectant fungicides?  
c) What measures would you suggest to overcome this problem of resistance development to systemic fungicides?

- Copyrights reserved -