

THE OPEN UNIVERSITY OF SRI LANKA
B.Sc. DEGREE PROGRAMME – BOTANY – LEVEL 5
FINAL EXAMINATION – 2010/2011
BTU3110 – PLANT PATHOLOGY II



DURATION – TWO AND A HALF (2 ½) HOURS

Date : 11th July 2011

Time : 9.30 a.m. – 12.00 noon

ANSWER ANY FOUR (04) OF THE FOLLOWING QUESTIONS.
ILLUSTRATE YOUR ANSWERS WITH FULLY LABELED DIAGRAMS
WHEREVER NECESSARY.

01. Compare the following:
 - a) Local acquired resistance and systemic acquired resistance.
 - b) Monocyclic diseases and polycyclic diseases.
 - c) Protectant fungicides and systemic fungicides.
02.
 - a) What are pectic substances and what part do they play in the structure and composition of the plant cell wall?
 - b) How are pectolytic enzymes classified and how do these different groups of enzymes degrade pectic substances in plants?
 - c) What is the effect of pectolytic enzymes on disease development?
03. Briefly describe the following:
 - a) Resistance of pathogens to chemicals.
 - b) Commercial use of microbes in biological control of plant disease.
 - c) Measurement of disease.
04. Explain the influence of pathogen factors on the development of the following symptoms:
 - a) Chlorosis in viral infections.
 - b) Morphological abnormalities in club root disease of crucifers.
 - c) Resistance to water flow in fungal infected xylem tissue.
05. Write a concise account of the different methods of plant disease control used to eradicate or reduce pathogen inoculum.
06. Describe how each of the following affects disease development:
 - a) Moisture in the environment.
 - b) Phytoalexin production.
 - c) Soil fungistasis.