

THE OPEN UNIVERSITY OF SRI LANKA

B.Sc. DEGREE PROGRAMME – BOTANY – LEVEL 5/6

FINAL EXAMINATION – 2012/2013

BOU4110 – ADVANCED PLANT PATHOLOGY

BTU3110/BTE5110 – PLANT PATHOLOGY II



DURATION: TWO (02) HOURS

DATE: 21st December, 2013.

TIME: 1.30 p.m - 3.30 p.m

ANSWER ANY FOUR (04) OF THE FOLLOWING QUESTIONS.

ILLUSTRATE YOUR ANSWERS WITH FULLY LABELED DIAGRAMMS WHEREVER NECESSARY.

1. (a) What are protectant fungicides and systemic fungicide? Give the characteristic features for each type of fungicide.
 - (b) State two (02) chemical groups for each type of fungicide giving one (01) commonly marketed example for each group.
 - (c) Explain how pathogens develop resistance to protective fungicides and systemic fungicides.
 - (d) What measures can be taken to avoid or reduce this problem of resistance building?
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2. Compare the following:
 - (a) Local acquired resistance and systemic acquired resistance.
 - (b) Horizontal resistance and vertical resistance.
 - (b) Roles of toxins and enzymes in pathogenesis.

3. (a) What symptoms are most visible in plant diseases due to adverse effects on water transport?
(b) Describe the different host factors and pathogen factors which contribute towards the establishment of these symptoms.
4. Write short notes on the following:
 - (a) Soil fungistasis.
 - (b) Elicitors in hypersensitive response.
 - (c) Disease progress curves.
5. (a) Define the terms disease incidence, disease severity and yield loss.
(b) Describe how these parameters are measured and expressed.
(c) Of what use are they in epidemiological studies?
6. Write a concise account on eradication or inoculum reduction as a disease control strategy.

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