

**THE OPEN UNIVERSITY OF SRI LANKA**  
**B.Sc. DEGREE PROGRAMME – BOTANY – LEVEL 05**  
**ASSESSMENT TEST III**  
**BOU3101/BOE5101 – PLANT PATHOLOGY**  
**(NO BOOK TEST)**  
**DURATION : ONE (01) HOUR**




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**DATE : 09<sup>th</sup> October 2011** **TIME: 4.00 p.m. – 5.00p.m.**

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Registration No.....

**ANSWER ALL QUESTIONS IN THE SPACE PROVIDED.**

01. a) Name two (02) common leaf diseases of rubber in Sri Lanka. Give the causative organism/s for each of these diseases.

i. Disease –  
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Causative organism –  
 .....

ii. Disease –  
 .....

Causative organism –  
 .....

b) Explain how you would differentiate these two diseases based on morphological symptoms.

.....  
 .....

c) Draw fully labeled diagrams of the spore-types which act as the inoculum for the spread of each of these diseases.

i.

ii.

(20 marks)

02. a) Name the causative organism of the fire blight of pears.

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b) Give a brief description of the morphology of this pathogen.

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.....

c) How does this pathogen enter its host?

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(10 marks)

03. a) What are downy mildews?

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- b) Name one (01) economically important downy mildew disease and its causative organism.

Disease –

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Causative organism –

.....

- c) With the aid of a fully labeled diagram, illustrate how this pathogen colonizes within its host tissue.

(14 marks)

04. a) What is the causative organism of the tobacco mosaic disease?

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- b) Describe the nature and morphology of this pathogens.

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- c) Briefly explain how you would attempt to inoculate this pathogen to a healthy tobacco of plant.

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(08 marks)

05. a) What are rust diseases?

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b) What is the causative organism of the rust disease on wheat?

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c) Name the other host of this heteroecious rust.

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d) In which host is the uredospore stage (repeating spore) produced in this rust?

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e) Which one of the two hosts would you remove to control disease and of what importance would this be?

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(18 marks)

06. a) What are the characteristic symptoms of anthracnoses?

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b) Name one anthracnose disease on tropical fruit. Name and classify its causative organism.

Disease –

.....

Causative organism –

- c) Draw and fully label the asexual reproductive structures of this causative organism.

(18 marks)

07. a) What are vascular wilts?

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- b) Briefly describe how the action of vascular wilt pathogens result in the wilting of their hosts.

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- c) Name two (02) genera of pathogens which cause vascular wilts.

i. ....

ii. ....

(12 marks)

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