

THE OPEN UNIVERSITY OF SRI LANKA

B.Sc. DEGREE PROGRAMME - BOTANY - LEVEL 05

BTU3110 – PLANT PATHOLOGY II

ASSESSMENT TEST – II

NO BOOK TEST

DURATION : ONE (01) HOUR



DATE : 20<sup>th</sup> March 2011

TIME: 11.00 a.m.-12.00 noon

*Registration No.....*

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

01. a) Name the two (02) types of defence mechanisms in plants against disease.

i. ....

ii. ....

b) Give one (01) example of pre-existing defences for each of the two types you mention.

Briefly describe how these mechanisms attempt to prevent disease.

Example for (i) .....

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Example for (ii) .....

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c) Give one (01) example of induced defences for each of the two types you mention.

Briefly describe how these mechanisms attempt to prevent disease.

Example for (i) .....

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Example for (ii) .....

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(22 marks)

02. a) What is meant by true resistance in plants?  
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b) Name the two (02) types of true resistance found in plants.  
i. ....  
ii. ....

c) How would you differentiate these two types of true resistance?  
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(16 marks)

03. a) What is/are the objective/s of plant breeding?  
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.....  
  
b) Name two (02) classical techniques and briefly describe how these are used  
in breeding for resistance.  
i. ....  
.....  
.....  
.....

- ii. ....
- .....
- .....
- .....
- c) Give two (02) advantages of using tissue culture in breeding for resistance.
- i. ....
- .....
- ii. ....
- .....
- d) Give one (01) example which has been successful in breeding for resistance using genetic engineering.
- .....
- .....
- .....
- e) Why is breeding for resistance a continuous process?
- .....
- .....
- .....

(20 marks)

04. a) What is an epidemic?
- .....
- .....
- .....
- b) State the three (03) main components which affect disease development.
- i. ....
- ii. ....
- iii. ....

- c) State two (02) factors each which influence the effect of each of these three components you mention.

i. ....

ii. ....

iii. ....

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(22 marks)

05. a) Briefly describe the nature of contact protective fungicides and systemic fungicides.

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- b) Give two (02) examples each of commercially available fungicides for each of these two groups of organic fungicides.

Examples for protective fungicides:

i. ....

ii. ....

Examples for systemic fungicides:

i. ....

ii. ....

- c) Why is it recommended to use these two types of fungicides in combination?

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(20 marks)