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THE OPEN UNIVERSITY OF SRI LANKA

B.Sc. DEGREE PROGRAMME

BOTANY- LEVEL 05

BYU 5301/ BYE5301 – PLANT PATHOLOGY

ASSESSMENT TEST I (OPEN BOOK TEST)

DURATION: ONE (01) HOUR



Date: 24th June 2018

Time: 10.30 am -11.30 am

Registration No:

Answer ALL questions in the space provided.

I. There are four (04) responses for each of the following questions. (i-iv). Clearly circle the most appropriate response to each of the questions.

(2 x 12 marks)

II. Give the most appropriate term/ terms for the statements given below:

1. A pathogen or it's part which is capable of initiating a new infection –

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2. Abiotic diseases caused by inanimate agents –

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3. Enzymes that break down pectic acid chains –

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4. The fungicide which is taken in and translocated within the plant –

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5. The progressive increase in the incidence of a particular disease within a defined population

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6. The plant which infected with a virus and carries the virus but, does not show any symptom -

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7. Development of floral organs into leaf-like structures –

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8. Total or partial destruction of a pathogen population by using other organism for disease control -

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9. The clustered appearance of leaves due to internodes of the plant failing to develop -

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10. The phase where the rate of increase of an infection is low during the development of an epidemic -

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11. The series of steps which are to be followed to establish the causative organism of any given disease *

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12. The inoculum that initiates a disease -

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13. The series of events which take place in succession, in development and perpetuation of the disease and the pathogen -

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14. The relationship between the amount of inoculum present and the rate of disease development -

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15. A group of microorganisms found in the phloem of diseased plant -

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(2 x 15 marks)

III. Give a brief account of the following:

1. The factors necessary for the proper dispersal of inocula by wind -

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2 The series of enzymatic reactions carried out by cellulases produced by the pathogens to breakdown the cellulose structures of plant cell wall during disease development -

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3. The basic steps involved in the process of fungal spores germination -

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4. The elements which should be present in a favorable manner in the progressive increase in the occurrence of a particular disease within a defined population -

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5, The effect of the pathogens on the process of translocation of nutrients and water during an infection -

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(5 x 6 marks)

IV. Briefly describe the terms given below:

1. Test plants

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2. Protectant fungicides

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3. Polycyclic diseases

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4. Host specific toxins

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(4 x 4 marks)

