## THE OPEN UNIVERSITY OF SRI LANKA B.Sc. DEGREE PROGRAMME – BOTANY- LEVEL05 FINAL EXAMINATION – 2021/2022 BYU5301/BYE5301 – PLANT PATHOLOGY DURATION: Two (02) HOURS



Date: 17th October 2022

Time: 9 30 a.m.- 11.30 a.m.

## ANSWER ANY <u>FOUR</u> (04) OF THE FOLLOWING QUESTIONS. ILLUSTRATE YOUR ANSWER WITH FULLY LABELED DIAGRAMS WHEREVER NESESSARY.

- 1. Describe the morphological symptoms of the following diseases citing one (01) example for each of them
  - i) Anthracnoses
- vi) Damping off
- ii) Blights
- v) Canker

iii) Wilts

- vi) Mosaics
- 2. Write a essay on effect of pathogens on host physiology.
- 3. (a) Name an economically important fungal leaf disease of banana (*Musa x paradisiaca*) in Sri Lanka.
  - (b) For the disease you mention in (a) above
    - i) Name and classify the causative organism.
    - ii) Describe the diagnostic symptoms.
    - iii) With the aid of fully labelled diagrams briefly outline the disease cycle.
    - iv) List recommended methods of disease management.
- 4. Write shorts on
  - i) Fungal rots.
  - ii) Reproductive structures in powdery mildews.
  - iii) Toxins.

- 5. Describe the structural and chemical barriers involved in host resistance against pathogen entry and spread.
- 6. Give a brief account of the role played by each of the following
  - (a) Appressoria
  - (b) Growth regulators
  - (c) Uredospore and Teliospores of rust fungi.