Bago University
Department of Botany
Second Semester Examination, September, 2019

Second Year (B.Sc.)
Botany Specialization
Answer All Questions

Bot.2110
Plant Pathology
Time allowed: (3) Hours

I. Determine whether each statement is TRUE or FALSE. **(10 marks)**

1. Healthy or normal plants develop and function to the maximum of their genetic potential.
2. Signs are the invisible parts of the pathogen or its products seen on the host.
3. A majority of diseases in plants are caused by virus.
4. Viral diseases are not controlled by pesticide chemicals.
5. Low temperatures, can damage the exposed or sensitive organs or may kill the entire plant.
6. Plant growing in acidic soils can be injured by aluminum or manganese toxicity.
7. Iron deficiency symptoms are very common in plants growing in low pH soils.
8. Discolouration of tisstie is most commonly by chlorosis or mosaic of stems.
9. The Dutch elm disease is giving rise to a polyetic epidermic.
10. Screreening is a critical step in the development of biocontrol agents.

II. Write correct word to complete the following sentences. **(10 marks)**

1. Wounded tree trunks often secrete protective ---------- that seal the wound from further infection.
2. The mycelium can be cultured in artificial ----------.
3. The galls are soft and ---------- when young and later become hard.
4. The fungus produces macro, micro conidia and ----------.
5. Entire plant turns ---------- and collapse due to rotting of plant roots.
6. Several plant extract are known to possess ---------- properties.
7. Verticillium wilt disease is caused by fungus ---------- *spp.*
8. The fungus belongs to class ----------.
9. The optimum temperature for the growth of pathogen is ----------.
10. White rot is a very destructive disease of ---------- and garlic.

III. Answer all questions. **(10 marks)**

1. What are the signs of diseases?
2. List the diseases caused by living agents.
3. Define the monocyclic and polycyclic epidermics.
4. Draw and labels diagram of hypersensitive cells.
5. How to manage chili wilt disease?

IV. Answer all questions. **(20 marks)**

1. Write the objectives of plant pathology.
2. Outline the postharvest disease in monocyclic epidermics.
3. Briefly explain the rapid active defenses at the membrane.
4. Summarize the integrated disease management.

V. Answer any three questions. **(30 marks)**

1. Discuss the importance of diagnosis in plant disease problems.
2. Describe the basic steps for reaching a disease diagnosis.
3. Write detailed in combinations of monocyclic and polycyclic epidermics.
4. How would you explain the physical responses?
5. Explain the soil born diseases of apple and their management.