BOT-553

Applied Mycology and Plant Pathology

M.Sc. BOTANY (MSCBOT- 12/13/16/17)

Second Year, Examination, 2019

Time: 03 Hours Max. Marks: 80

Note: This paper is of Eighty (80) marks, divided into two (02) sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

SECTION-A

(Long-Answer-Type Questions)

Note: Section 'A' contains five (05) long-answer-type questions of fifteen (15) marks each. Learners are required to answer any three (03) questions. $(3\times15=45)$

- What are primary and secondary metabolites of fungi? Write a detailed note on the production of organic acids from fungi.
- 2. Write an essay on control of plant diseases.

- 3. Describe the biotechnological applications of fungi in detail.
- 4. Describe symptoms of plant diseases caused by bacteria. Write detailed account on causal organism, disease cycle and control measures of any three bacterial plant diseases.
- 5. Define mycorrhizae and its types. Describe the role and significance of mycorrhizae.

SECTION-B

(Short Answer Type Questions)

Note: Section 'B' contains eight (08) short-answer type questions of seven (07) marks each learners are required to answer any five (05) question only. $(5\times7=35)$

- Give a brief account on effect of environment in disease development.
- 2. Discuss the role of fungi in biodegradation.
- Describe the symptoms, causal organism, disease cycle and control measures of any one plant disease of fruit.

- 4. Write a note on medicinal value of mushroom.
- 5. Enlist only name of the disease, causal organisms and host, of any seven plant diseases of vegetables.
- 6. Briefly describe the cell structure of fungi.
- 7. Write a short note on the symptoms of nematode diseases in plants.
- 8. Explain the role of fungi in the control of nematodes.
