Reg. No

Name

M. Sc DEGREE END SEMESTER EXAMINATION - OCTOBER 2019 SEMESTER 1 : BOTANY

COURSE : 16P1BOTT02 : MYCOLOGY AND CROP PATHOLOGY

(For Regular - 2019 Admission and Supplementary - 2016/2017/2018 Admissions)

Time : Three Hours

Max. Marks: 75

Section A Answer any 8 (2 marks each)

- 1. Draw and explain the intranuclear division in fungi.
- 2. Expand AFTOL? Also mention the conventional fungal groups that excluded in AFTOL classification? Give the number of Phyla, subphyla and classes, outlined in the classification.
- 3. Give a note on Allomyces.
- 4. Describe the silent features of Zygomycetes.
- 5. Describe the significance of VAM fungi.
- 6. Distinguish between endosymbiont and ectosymbiont.
- 7. Name the causative organisms of [a] grey leaf spot of coconut

[b] red rot of sugarcane

- 8. Write a note on anthracnose of mango.
- 9. What are fumigants? Give one example.
- 10. How do moisture affect the development of plant diseases?
- 11. Give an account on transmission of plant disease.
- 12. What are the defense structures associated with plant cell wall?

 $(2 \times 8 = 16)$

Section B Answer any 7 (5 marks each)

- 13. Write a short note on significance of ITS in fungi identification
- 14. Explain the fungal classification by Ainsworth (1973).
- 15. Give a brief account of somatic phase of Myxomycetes. Draw a well labelled diagram of sporangium of *Stemonitis*.
- 16. Describe the crozier formation in Ascomycetes.
- 17. Mention the ecological significance of Lichens.
- 18. Write an account of powdery mildew of rubber.
- 19. Describe the symptoms, causative organism, disease cycle and control measures of rust diseases of wheat.
- 20. Enumerate the biological means of disease control.
- 21. How do you control plant diseases caused by virus?
- 22. Describe the effect of moisture and soil pH on the development of plant diseases.

Section C Answer any 2 (12 marks each)

23. Give an outline on classification of fungi as proposed by Ainsworth (1973). Enumerate main features of different classes of fungi.

OR

- 24. Explain various types of sexual reproduction in Ascomycotina with examples. Give appropriate diagrams.
- 25. Explain disease cycle in plant and the different ways of spread and transmission of plant diseases.

OR

26. Write an essay on the effect of major enviornmental factors on the development of plant diseases.

 $(12 \times 2 = 24)$