Reg. No..................................... Name...

M.SC. DEGREE END SEMESTER EXAMINATION NOVEMBER 2016

SEMESTER **– 1: BOTANY**

COURSE: **16P1BOTT02 –: MYCOLOGY AND CROP PATHOLOGY**

Time: Three Hours   Max. Marks: 75

PART-A

I. Answer **any eight** questions. Each question carries 2 marks
   1. Write a note plantibodies and their significance in plant defense
   2. Give a brief note on the general features of Chytridiomycetes.
   3. Explain the fungal-higher plants mutualism.
   4. Explain Koch's postulates
   5. What is meant by a macrocyclic fungus?
   6. Explain the role of polysaccharides in pathogenesis.
   7. What are the defense structures associated with plant cell walls?
   8. Define residual effect? How is it significant?
   9. Explain the causal organisms and symptoms of vein clearing disease in Ladies finger.
   10. Differentiate between a selerotia and a rhizomorph.
   11. Give an account on fungi as saprophytes.
   12. Explain disease triangle.
   13. What are the mechanisms involved in the penetration and entry of pathogen?

                                                      (2 x 8 = 16)

PART-B

II. Answer **any seven** questions. Each question carries 5 marks
   14. What are secondary metabolites? How do they affect pathogen attack in plants?
   15. Give a detailed account on the sexuality in Basidiomycetes.
   16. Explain the role of fungi as insect symbionts.
   17. What are the characteristic features and classification of myxomycetes?
   18. Give a note on DNA barcoding in Fungi.
   19. Explain the fungal classification by Ainsworth.
   20. With suitable example explain biological disease control.
   21. Give a detailed account on the causal organism symptoms and control measures of bacterial canker in citrus.
   22. What is the role of environmental factors in plant disease management?

                                                      (5 x 7 = 35)

PART-C

III. Answer **any two** questions. Each question carries 12 marks
   23. Write an essay on the life cycle and reproduction in Zygomycetes.

24. Give a detailed account on different fructifications in Fungi.

OR

25. Explain disease cycle in plants and discuss about the dissemination methods in plants.

OR

26. Write an essay on plant disease management in crop plants.

(12 x 2 = 24)