

B.Sc. 2nd Semester (Honours) Examination, 2023 (CBCS)**Subject : Botany****Course : CC-III****(Mycology and Phytopathology)****Time: 2 Hours****Full Marks: 40**

*The figures in the margin indicate full marks.
Candidates are required to give their answers in their
own words as far as practicable.*

1. Answer *any five* of the following questions: 2×5=10
 - (a) Mention two major differences between fungi belonging to Oomycota and true fungi.
 - (b) Name the fungi which are used for preparation of biofertilizer and of 'Cheese' respectively.
 - (c) What is heterokaryosis? Name the related fungus where it occurs.
 - (d) What is 'Hertig Net'? Where do you find it?
 - (e) Give the generic names of one corticolous and one saxicolous lichen.
 - (f) Give example of a mycofungicide and mycoinsecticide.
 - (g) What is heterocious rust? Give one example.
 - (h) Differentiate between blight and blast diseases.

2. Answer *any two* of the following questions: 5×2=10
 - (a) What are slime moulds? Characterise various types of plasmodia. 2+3
 - (b) What are VAM fungi? Write the importance of mycorrhiza. 2+3
 - (c) Distinguish between endemic and epidemic disease citing examples. What do you mean by sporadic disease? 3+2
 - (d) What is the causal organism of citrus canker disease? Briefly describe the symptoms and important control measures of the disease. 1+2+2

3. Answer *any two* of the following questions: 10×2=20
 - (a) Briefly describe different types of symptoms with proper example. What is ergot? Why is it medicinally significant? 6+2+2
 - (b) What are macrocyclic rust fungi? Schematically represent the life cycle of that fungus and describe different spore stages with their ploidy level. 2+3+5
 - (c) Explain the phenomenon of dikaryotization with reference to members of Basidiomycota. What are the differences between parasexual cycle and sexual cycle? 7+3
 - (d) Give an account of post infectional structural defence mechanisms of plants. What is phytoalexin? 8+2