

U.G. 2nd Semester Examination - 2022

BOTANY

[HONOURS]

Course Code : BOT-H-CC-T-04

(Diversity of Fungi and Plant Pathology)

Full Marks : 40

Time : 2½ Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

1. Answer any **five** questions: 2×5=10
- Is dikaryotization different from diploidization? Comment.
 - What is systemic fungicide? Give an example.
 - Mention atleast two affinities of fungi each with plants and animals.
 - Why Oomycota members are not considered as true fungi?
 - Define bioluminescence in fungi. Give an example.
 - What is a dolipore septum? Where do you find it?
 - Name two fungi used for large scale production of organic acid and their products.
 - What is papulospore? Where do you find it?

2. Answer any **two** questions: 5×2=10
- What is a plasmodium? Discuss briefly the different types of plasmodia in slime molds. 1+4=5
 - Write short notes on Koch's postulate. 5
 - What are the different spore types in *Puccinia graminis tritici*? Which ones are infective to wheat? What is meant by physiological specialization? 2+1+2=5
 - Briefly discuss the economic importance of lichen. 5
3. Answer any **two** questions : 10×2=20
- What is parasexual cycle? Discuss the different steps involved in parasexual cycle. Mention its significance. 2+6+2=10
 - What is prosorus? Why is *Synchytrium endobioticum* considered as a holocarpic and obligate plant pathogen? Give an account of sexual reproduction of that fungus. 1+2+7=10
 - Discuss elaborately the application of fungi in food industry. 10
 - Write down the etiology, symptoms, disease cycle and control measures of White Rust of Crucifer. Why is the disease so named? 2+2+3+2+1=10

[Turn over]