

**UG 1<sup>st</sup> Semester Examination 2021**  
**BOTANY (Honours)**  
**Paper: DC- 2**  
**[CBCS]**

**Full Marks: 25**

**Time: Two Hours**

*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:** **1×5=5**
- a) Justify the term fungi imperfecti.
  - b) What is cleistothecium? Give an example.
  - c) Define inoculum potential.
  - d) Name the causal organism of Citrus canker and black stem rust of wheat.
  - e) What is mycobiont? Mention its role.
  - f) What is PR protein? Give one example.
  - g) What is parasexuality?
2. **Answer any four of the following:** **3×4=12**
- a) Give the characteristic features of Ascomycotina.
  - b) Describe the ecological role of lichens in pollution monitoring.
  - c) Write a brief note on the disease triangle.
  - d) Describe Koch's postulate. State its significance.
  - e) Explain the strategies of biological management of plant diseases.
  - f) What is phytoalexin? State its functions. (1+2)
  - g) Briefly state the role of mycorrhizae in agriculture and forestry.
3. **Answer any one of the following:** **8×1=8**
- a) Describe with a suitable diagram of the mechanism of host-penetration. Differentiate between SAR and ISR. (4+2)+2

- b) State the role of fungi in biotechnology. With suitable diagram describe the industrial production of Ethanol. (3+5)