

**2008****M.Sc.****1st Semester Examination****BOTANY****PAPER—III****Full Marks : 40****Time : 2 Hours**

*The figures in the right-hand margin indicate full marks.*

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

*Illustrate the answers wherever necessary.*

*(Write the answers Question of each Unit in separate books)*

**Unit—I****[ Marks—20 ]**

1. Answer the following questions (any four) : 1×4
  - (a) What is MLC ?
  - (b) Define symbionts.
  - (c) Name one necrotrophic mycoparasite.
  - (d) Write two important characteristics of Glomeromycota.
  - (e) What do you mean by hemibiotrophs ?
  - (f) Write two common sources of ciftatoxin.
  - (g) Name the source of an antifungal antibiotic.
  
2. Answer any two of the following : 4×2
  - (a) Unique characters of fungi.
  - (b) Give the outline of any modern fungal classification.
  - (c) Uses of fungi in food and medicinal industries.
  - (d) Factors affecting sporulation in fungi.

*(Turn Over)*

3. Answer any *one* of the followings. 3+5
- (a) Discuss the types of heterothallism studied by you.
  - (b) Distinguish between mycotoxin and pathotoxin. Write a brief note on mycotoxin.

**Unit—II**

[ Marks—20 ]

4. Answer the following questions (any *four*) : 1×4
- (a) Distinguish between pathogenicity and pathogenesis.
  - (b) What is PR-protein.
  - (c) Define chemotaxis.
  - (d) Why biotrophic pathogen produce cell wall degrading enzyme.
  - (e) What is macerating enzyme ?
  - (f) Give an example of host-specific toxin.
  - (g) What is myconhiza ?
5. Answer any *two* of the following : 4×2
- (a) Modern diagnostic tools used to diagnose plant diseases ;
  - (b) Koch's postulates and its limitation ;
  - (c) Initial stages of pathogenesis and
  - (d) Role of chitinase in pathogenesis.
6. Answer any *one* of the following : 1×8
- (a) Write with examples the structural defence of a host plant.
  - (b) Discuss the role of pectolytic enzyme in pathogenesis with suitable examples.
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