

May 2025
M.Sc.
Second Semester
CORE – 06
BOTANY
Course Code: MBOC 2.21
(Mycology & Plant Pathology)

Total Mark: 70
Time: 3 hours

Pass Mark: 28

Answer five questions, taking one from each unit.

UNIT-I

1. Give an account of the historical development of mycology. 14
2. Give a detailed account of the sub-division Basidiomycotina. 14

UNIT-II

3. Write a note on the recent trends in fungal classification. 14
4. Discuss the role of fungi in medicine and agriculture citing suitable examples. Write a brief account of heterothallism. 10+4=14

UNIT-III

5. Give an account of plant disease detection in field investigation. Briefly discuss the discovery methods. 10+4=14
6. Give an account of the following: 7×2=14
 - (a) Cultural methods of plant disease control
 - (b) Koch's postulates in laboratory investigation

UNIT-IV

7. Describe the mode of infection. Explain in detail how host plants respond to infection. 6+8=14
8. Write a note on each of the following: 7×2=14
 - (a) Role of toxins in pathogenesis
 - (b) Effects of environmental factors on disease development

UNIT-V

9. Write a detailed account of the symptoms, etiology, disease cycle and management of rust of wheat. Illustrate your description with appropriate diagrams. $11+3=14$
10. Describe the symptoms and disease cycle of the following: $7\times 2=14$
- (a) Powdery mildew of grapes
 - (b) Damping off of seedlings
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