

2023
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 on the following: 7×2=14
 - (a) General characteristics of slime molds
 - (b) Reproduction in lichens

2. Give an account on the characteristics of Ascomycotina. Give a description of the life cycle of one fungus representing this sub-division along with diagram. 5+6+3=14

UNIT-II

3. Give an account on the recent trends and criteria used in the classification of fungi with reference to their vegetative and reproductive structures. 7+7=14

4. Give an account on the following: 7×2=14
 - (a) Heterothallism in fungi
 - (b) Economic importance of fungi in agriculture

UNIT-III

5. Give an account of the significance of plant diseases diagnosis in field, laboratory investigation and isolation of plant pathogens. 5+5+4=14

6. Write notes on the following: 7×2=14
(a) Biological control methods to prevent plant disease
(b) Koch's postulates and its significance

UNIT-IV

7. Give an account on the following: 7×2=14
(a) Host defence mechanism
(b) Effect of environment on disease development
8. Give an account on the role of enzymes and toxins in pathogenesis. 7+7=14

UNIT-V

9. Give an account on the symptoms and disease cycle of the following: 7×2=14
(a) Powdery mildew of grapes
(b) Red rot of sugarcane
10. Give an account on the symptoms, etiology and recent methods of disease management of the following diseases: 7×2=14
(a) Damping off of seedlings
(b) Rust of wheat
-