

Exam. Code : 210001

Subject Code : 3776

M.Sc. Botany 1st Semester

FUNGI AND PLANT PATHOLOGY

Paper—BOT—C512

Time Allowed—3 Hours]

[Maximum Marks—50

Note :— Attempt any **five** questions selecting at least **one** question from each Section. All questions carry equal marks.

SECTION—A

1. Giving salient features, classify Mastigomycota up to order level. 10
2. Give an account of the structure and life cycle of the following :
 - (a) *Taphrina*
 - (b) *Mycosphaerella*. 2×5=10

SECTION—B

3. Write short notes on the following :
 - (a) Disease forecasting
 - (b) Defense mechanism in plant against pathogens. 2×5=10
4. Give an account of the structure and life history of the following :
 - (a) *Ustilago*
 - (b) *Sclerotium*. 2×5=10

SECTION-C

5. Give an account of the symptoms, causal organism and control measures of the following plant diseases :
- (a) Late blight of potato
 - (b) Powdery mildew of bajra. 2×5=10
6. Give an account of the symptoms, causal organism and control measures of the following plant diseases :
- (a) Bacterial blight of rice
 - (b) Papaya leaf curl. 2×5=10

SECTION-D

7. (a) Give an account of the role of mycorrhizae in agriculture and plant growth.
- (b) Comment upon the contributions of Robert Koch and W.M. Stanley. 2×5=10
8. Write detailed notes on the following :
- (a) Heterothallism in Basidiomycetes
 - (b) Parasexual cycle. 2×5=10