

Exam. Code : 210001

Subject Code : 4788

M.Sc. Botany 1<sup>st</sup> 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. The **fifth** question may be attempted from any Section. All questions carry equal marks.

**SECTION—A**

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

**SECTION—B**

3. Write short notes on the following :—
  - (a) Plant Quarantine
  - (b) Plant disease clinics. 2×5=10
4. Give an account of the structure and life history of the following :—
  - (a) *Melampsora*
  - (b) *Rhizoctonia*. 2×5=10

### SECTION-C

5. Give an account of the symptoms, causal organism and control measures of the following plant diseases :
- (a) Wilt of Cotton
  - (b) Loose smut of wheat. 2×5=10
6. Give an account of the symptoms, causal organism and control measures of the following plant diseases :
- (a) Citrus canker
  - (b) Leaf curl of tomato. 2×5=10

### SECTION-D

7. (a) Give an account of biological control and comment upon DeVine.
- (b) Comment upon the contributions of E.J. Butler and Alexander Fleming. 2×5=10
8. Write detailed notes on the following :—
- (a) Heterokaryosis
  - (b) Enlist 5 important institutes related to mycology and plant pathology. Also state their mandate. 2×5=10