

2013

M.Sc.

1st Semester Examination

BOTANY

PAPER—BOT-103

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.

Use separate answerscripts for each unit.

Unit—I

(Mycology)

(Marks : 20)

1. Answer any four questions from the following : 1X4
- (a) What is tetralolar heterothalism ?
 - (b) Define hemibiotrophs.
 - (c) What is Parenthosome ?
 - (d) What is the function of Rhizomorph ?

(Turn Over)

- (e) Name two antibiotic producing fungi.
- (f) What is Vomitoxin ?
2. Write short notes on any *two* of the following : 4x2
- (i) Ergot toxin.
- (ii) Composting of substrate for button Mushroom cultivation.
- (c) Factors affecting Fungal growth.
3. How does sexual cycle differ from parasexual cycle ?
Discuss the major events of parasexual cycle. 2+6

Or

Why Lichen is called bioindicator of pollution ? What is its ecological importance? Describe the reproduction in Lichen. 2+2+4

Unit—II

(Plant Pathology)

(Marks : 20)

4. Answer any *four* questions from the following : 1x4
- (a) What is meant by induced systemic resistance ?
- (b) What is Host specific toxin ? Give example.
- (c) Define Inoculum potential.
- (d) Name one Elicitor of Phytoalexin.

(e) What is PR protein ?

(f) What is the function of arbuscle ?

5. Answer any two of the following : 4×2

(a) Describe the structure and function of ectomycorrhizal root.

(b) What do you mean by Disease triangle ?

(c) Write about the modern method of Plant disease diagnosis.

6. What is the difference between enzyme and toxin? Write a brief note on the liberation and dispersal method of fungal inoculum. 3+5

Or

Write the Casual organism of stem wilt of *Casuarina*. Describe the mode of infection, symptom and the control of the disease. 1+2+2+3
