

2009

M.Sc.

1st Semester Examination

BOTANY

PAPER—III

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.

Write the answers to questions of each unit in separate books.

Unit—I

[Marks : 20]

- 1. Answer the following questions (any four) : 1×4**
- (a) What is bothrosome ?
 - (b) Name the chemical to which fungal micro tubules are sensitive.
 - (c) What is Rhizine ?

(Turn Over)

- (d) Given one example of biotrophic parasite.
- (e) What is Spitzenkörper?
- (f) Name one lichen used for preparation of dyes.
- (g) Give one example of primarily homothallic fungi.
- (h) What is facultative saprophytes?

2. Answer the following (any two) : 4×2

- (a) Role of fungi in production of bread and cheese.
- (b) Parasexuality.
- (c) Devices responsible for production of huge spores in fungi.
- (d) Morphological types of Lichen.

3. What do you mean by mycotoxin? Write a brief account of aflatoxin with reference to structure and metabolism.

2+6

Or

What do you mean by Lichen? Write a note on internal structures of different types of lichens you have studied.

2+6

Unit—II

[Marks : 20]

4. Answer any *four* of the following : 1×4
- (a) What is virulence ?
 - (b) What is meant by vertical resistance ?
 - (c) Write the full form of ELISA and mention its application.
 - (d) What do you mean by inoculum potential ?
 - (e) Name the causal organisms of tungro disease of rice.
 - (f) What is pandemic disease ?
 - (g) What is the difference between germ tube and hyphae ?
 - (h) What is the function of arbuscule ?
5. Write notes on (any *two*) : 4×2
- (a) Role of toxins in pathogenesis.
 - (b) Discuss briefly the role of biotechnology in plant pathology.
 - (c) Dispersal of inoculum.
 - (d) Role of mycorrhizae in agriculture and forestry.

6. Answer any one of the following :

1×8

(a) Give an outline idea of role of phytoalexins in plant disease resistance.

Or

(b) Write the symptoms and control of pink disease of Eucalyptus.
