

M.Sc. 1st Semester Examination, 2023

BOTANY

PAPER – BOT-103

Full Marks : 50

Time : 2 hours

Answer all questions

The figures in the right hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

PAPER – BOT-103.1

(Mycology)

1. Answer any two questions : 2 × 2

- (i) What is dolipore septum ? Where is it found ?

- (ii) Write two salient features of Phyla Choanozoa.
- (iii) Mention two modifications of fungal hyphae.
- (iv) What is autotrophic mode of nutrition ? Give an example.

2. Write short notes any *two* : 4 × 2

- (i) Buller drop mechanism of basidiospore dispersal.
- (ii) Clamp connection.
- (iii) Role of fungi in ecology
- (iv) Spore discharge mechanism of *Sphaerobolus stellatus*.

3. Answer any *one* question : 8 × 1

- (i) Discuss in detail about Phyla Neocallimastigomycota and Glomeromycota along with examples. 4 + 4
- (ii) What are the unique features of fungi ? Discuss the different mechanisms of ascospore discharge with examples. 4 + 4

PAPER — BOT-103.2

(*Plant Pathology*)

4. Answer any *two* questions : 2 × 2

- (i) What is inoculum ?
- (ii) How is *Sclerotinia disjuncta* formed ?
- (iii) What weather conditions are required for liberation of dry spores ?
- (iv) What is ELISA ?

5. Write short notes on any *two* : 4 × 2

(i) Liberation of slime spores

(ii) Spore liberation in *Cyathus*

(iii) Contribution of Pier Antonio Micheli

(iv) Modern plant disease diagnosis method.

6. Answer any *one* question : 8 × 1

(i) Discuss in detail about the diagnosis of infectious and non-infectious diseases. 4 + 4

(ii) Briefly discuss the concept of disease triangle. Discuss the role of environment in disease development. 4 + 4

[Internal Assessment — 5 + 5 Marks]
