

M.Sc. 1st Semester Examination, 2010

BOTANY

PAPER—BOT-103(III)

Full Marks : 40

Time : 2 hours

The figures in the right-hand margin indicate 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—1

[Marks : 20]

1. Answer the following questions (any four) : 1 x 4

(a) What is woronin body ?

(b) What do you mean by pseudoplasmodium ?

(Turn Over)

(2)

- (c) Give one example of hemibiotrophic fungi.
- (d) What is heterokaryosis ?
- (e) Write the difference between aflatoxin and pathotoxin.
2. Answer the following (any two) : 4 x 2
- (a) Role of fungi in organic acid production.
- (b) Self compatibility in fungi.
- (c) Factors affecting fungal growth.
- (d) Devices used by fungi for their spore liberation.
3. Do you think outbreeding encourages genetic heterogeneity ? Write a note on bi- and tetra-polar heterothallism. 2 + 6

Or

Write about uniqueness of fungi supporting its placement close to plants and animals. Mention the role of rRNA in fungal classification. 6 + 2

UNIT-2

[Marks : 20]

4. Answer any *four* of the following : 1 x 4
- (a) What do you mean by non-host resistance ?
 - (b) What is SAR ?
 - (c) Define inoculum.
 - (d) Name one commercially used phytoalexin.
 - (e) Name one bio-control agent.
 - (f) Write an example of soil borne tree disease.
 - (g) What is epidemiology ?
 - (h) Define Hartig net.
5. Write notes on (any *two*) : 4 x 2
- (i) Role of mycorrhiza in plant disease control
 - (ii) Integrated Disease Management

(iii) Modes of landing of propagules

(iv) Koch's rules and their limitations.

6. What is appressorium ? Write a brief note on host-pathogen recognition mentioning host and pathogen factors acting as signals for the same. 1 + 7

Or

Write the cause, symptoms and control measures of root rot disease of Khair. 1 + 2 + 5
