2016

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.

Unit—I

(*Mycology*)

1. Answer any *four* questions of the following : 1×4

(a) What is a sorocarp ?

(b) What is aflatoxin-M ?

(c) Name the fungal source of cellulose.

(d) Name a fungus forming cleistothecium.

(e) What is meant by heteroecious life cycle ?

(f) What is tetrapolar heterothallism ?

2. Write notes on *two* of the following : 2×4

(a) Production of ethanol.

(b) Mating in Zygomycota.

(c) Characteristic features of true fungi.

(d) Mechanism of basidiospore discharge.

3. Characterize the phyla Myxomycota and Plasmodiophoromycota with examples. 4+4

Or

Explain molecular basis of heterothallism in fungi. 8

Unit—II

(*Plant Pathology*)

1. Answer *four* from the following questions : 1×4

(a) Why generally red onions are resistant to pathogen attack ?

(b) Name a resistant citrus variety.

(c) What is PCNB ?

(d) Name a growth promoting substance.

(e) What is appressorium ?

(f) What is Ti-plasmid ?

2. Write short notes on any *two* of the following : 2×4

(a) Biotic and abiotic elicitors.

(b) PR Proteins.

(c) Hypersensitive reaction.

(d) Inoculum potential in plant infection.

3. Answer any *one* of the following questions : 1×8

(a) Write the symptoms and control measures of Anthracnose of jute and Wilt disease of pigeon pea. 4+4

(b) Briefly describe the control mechanism of plant diseases by exclusion. 8
