#### **PG CBCS**

## M.Sc. Semester-I Examination, 2020 BOTANY

# PAPER: BOT 103

#### MYCOLOGY & PLANT PATHOLOGY

Full Marks: 40 Time: 2 Hours

## Write the answer for each unit in separate sheet

### BOT 103.1 MYCOLOGY

### 1. Answer any <u>two</u> questions from the following:

 $10 \times 2 = 20$ 

- I. How fungi are closely related to animals? Distinguish between homothallism and heterothallism.
- II. Briefly describe the mating system in Basidiomycota. Discuss various kinds of sexual reproduction found in fungi.5+5
- III. What are holocarpic fungi? Write note on clamp connection in fungi. 2+8
- IV. Define sterigma and hilum. Explain the molecular basis of heterthallism in fungi.

4+6

V. Explain the mode of action of aflatoxins. Role of fungi in antibiotic and organic acids production.

5+5

### BOT 103.2 PLANT PATHOLOGY

### 2. Answer any two questions from the following:

 $10 \times 2 = 20$ 

- I. Write down the infection phenomena of plant pathogens and also discuss the factors affecting the infection.
- II. Discuss different methods of control of plant diseases.
- III. Discuss different defense mechanisms of plants against plant pathogens.
- IV. Give symptoms, etiology, and epidemiology of Black stem rust of wheat.
- V. Discuss the role of plant growth regulators in plant diseases.

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