

**PG CBCS**  
**M.Sc. Semester-I Examination, 2021**  
**BOTANY**  
 PAPER: BOT 196  
 (PRACTICAL)

Full Marks: 50

Time: 3 Hours

**Write the answer for each unit in separate sheet**

**BOT 196.1**

**MYCOLOGY & PLANT PATHOLOGY**

**A. Answer any ONE question of the following: 1X15=15**

1. Describe the causal organism, host, disease cycle, and identifying characters of black stem rust of wheat and red rot of sugarcane. 7+8
2. Describe the causal organism, host, disease cycle and identifying characters of downy mildew and powdery mildew of crop plants. 7+8

**B. Answer any ONE question from the following: 1X10=10**

1. Draw and label the microscopic view of basidiospore. Write the identifying characters of Basidiomycota. 4+6=10.
2. Mention the procedure of isolation of yeast from fruit samples. 10

**BOT 195.2**

**PTERIDOPHYTES & GYMNOSPERMS**

**A. Answer any ONE question from the following. 15 ×1= 15**

1. Diagrammatically describe the vegetative and reproductive structure of *Pteris* sp. Mention its systematic position. 6+6+3
2. Draw and describe morphological and anatomical features of the male and female reproductive structure *Gnetum* sp. Mention its systematic position. 6+6+3
3. Diagrammatically describe the vegetative and reproductive structure of *Selaginella* sp. Mention its systematic position. 6+6+3

**B. Answer any ONE question from the following 10 ×1= 10**

1. Write down the identifying characters of *Calamities* sp. and *Lepidocarpon* sp. 5+5
2. Describe the anatomy of *Pinus* needle and *Marsilea* sporocarp. 5+5