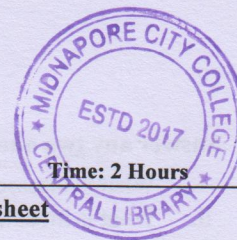


**PG (NEW) CBCS**  
**M.Sc. Semester-I Examination, 2019**  
**BOTANY**  
**PAPER: BOT-103**  
**(MYCOLOGY & PLANT PATHOLOGY)**

Full Marks: 40



Time: 2 Hours

Write the answer for each unit in separate sheet

UNIT I:

**MYCOLOGY**

1. Answer any two questions of the following: 2×2=4
  - i. What is haustorium?
  - ii. What do you mean by eucarpic and holocarpic fungi?
  - iii. What is Pseudo homothallism?
  - iv. Name two fungi used in production of citric acid.
  
2. Answer any two questions of the following: 4×2=8
  - i. Mention the important characteristics of Basidiomycotina.
  - ii. Write a note on saprophytic nutrition of fungi.
  - iii. Write down mode of action of aflatoxin. Name two genera that produce it. 3+1
  - iv. Pointout different ecological importance of fungi.
  
3. Answer any one question of the following: 8×1=8
  - i. Mention different criteria for fungal classification? Write a brief account of Ainsworth classification. Mention different ascocarps produced by fungi. 2+4+2
  - ii. What is heterothallism? Explain it with reference to the forms studied by you, in different classes of fungi. Mention role of fungi as food. 2+4+2

(Turn Over)



(2)  
UNIT II:  
**PLANT PATHOLOGY**

4. Answer any two questions of the following:  $2 \times 2 = 4$
- What is disease triangle?
  - What is inoculum?
  - What do you mean by disease forecasting?
  - Mention the casual organism of 'scab of potato' and 'wilt of pigeon pea'.
5. Answer any two questions of the following:  $4 \times 2 = 8$
- Mention mechanism of dispersal of plant pathogens.
  - Mention role of phytotoxins in disease development.
  - Discuss host resistance mechanisms against plant pathogen.
  - Write a note on pre and post infectional structural defence in plants.
6. Answer any one question of the following:  $8 \times 1 = 8$
- Describe the infection phenomena of plant pathogens. Also discuss the factors affecting the infections. Briefly discuss the different methods of control of plant diseases.  $3+2+3$
  - What are jasmonates(JA)? What are their main functions? Mention its signaling pathway in plant resistance. Mention role of downy mildew in agricultural productivity.  $1+1+4+2$



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