Botany (P.G.)

[CBCS]

M.Sc. First Semester End Examination-2023

(Regular & Supplementary Paper)

PAPER- 103

[Mycology and Plant Pathology]

Full Marks: 40 ***Time: 02 Hrs***

The figures in the right-hand margin indicate marks.
Candidates are required to give their answers in their own words as far as practicable.
Illustrate the answers wherever necessary.

Unit-1

Full Marks 20

[Mycology]

Group A

1. Answer any four questions of the following: **1x4= 4**

a. Compare eucarpic & holocarpic fungi with example.

b. Which fungal organism contributed to both ethanol generation and baking process?

c. What is homothallic fungi?

d. What makes the cell wall of oomycota (Oomycetes) unique?

e. What do you understand by pseudoparenchyma in fungi?

f. Give example of a poisonous fungi.

Group B

2. Answer any two questions of the following: 2x4= 8

a. Write a general account on mycotoxins with reference to afla toxins. 2+2

b. Explain different types of sexual and asexual spore in Fungi. 2+2

c. Write a short note on

i) Role of fungi in Agriculture

ii) Parasexuality in fungi 2+2

d. What are the different thallus structures found in fungi?

Group C

3. Answer any one question of the following: 1x8=8

a. Explain with the help of diagram, the development of ascocarp in Asco mycotina. Mention different types of ascocarps in Ascomycotina. 4+4

b. Discuss any modern system of classification of fungi. Give characters of each phylum.

Unit - 2

Full Marks 20

[Plant Pathology]

Group A

1. Answer any four questions of the following: 1x4= 4

a. Distinguish between smut & rust disease.

b. Define oxplosive epidemic?

c. Mention the name of causal organism of "Downy mildew of sunflower" disease.

d. What is SAR?

e. Explain 'Disease traingle'?

f. Differentiate between fungistat & fungicide.

Group B

2. Answer any two questions of the following: 2x4= 8

a. Write about the different prophylactic methods of plant disease control. 4

b. What are macerating principle? Explain it to the role of disease development. 4

c. Write a short note on

a) Exclusion method in disease control.

b) Disease Forecaseting 2+2

d. Discuss different stages of "Host Pathogen" Interaction?

Group C

3. Answer any one question of the following: 1x8=8

a. Describe with diagram about symptoms Diksease cycle, control measure and name of causal organism of 'wilt of Pigeon Pea' disease? Who is responsible of "Crown Gall" disease of plants? 1+2+2+2+1

b. Discuss the different types of direct and indirect transmission of plant pathogen. Write about the disease cycle and control measures of Blight disease of Rice.

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