3 (Sem-2/CBCS) BOT HC 1

2023 BOTANY

(Honours Core)

Paper: BOT-HC-2016

(Mycology and Phytopathology)

Full Marks: 60

Time: Three hours

The figures in the margin indicate full marks for the questions.

1.	Ans	swer the following questions: 1×7=7
	(a)	Crozier formation is observed in (Fill in the blank,
	(b)	What do you mean by systemic fungus?
	(c)	Muriform conidia are present in (Fill in the blank)
	(d)	What is dikaryotic life cycle?

- (e) Rhizopus is commonly known as _____.
 (Fill in the blank)
- (f) What is a cleistothecium?
- (g) What is the causal organism of Black Stem Rust of wheat?
- 2. Answer the following in brief: 2×4=8
 - (a) What are the chemical components of the fungal cell wall?
 - (b) Difference between ascospores and basidiospores.
 - (c) What is clamp connection?
 - (d) What is basidiocarp?
- 3. Write short notes on **any three** of the following questions: 5×3=15
 - (a) Methods of asexual reproduction in fungi
 - (b) Role of fungi in industry
 - (c) Diagnostic features of basidiomycetes
 - (d) Development of Ascus and ascospores in Ascomycetes

- (e) Ectomycorrhizae and Endomycorrhizae
- 4. Answer any three of the following questions: 10×3=30
 - (a) Write an elaborate description of citrus canker disease mentioning its control measures.
 - (b) Give an outline of viral diseases of plants. Discuss Tobacco Mosaic Virus (TMV) disease. Mention its control measure.
 - (c) Explain mushroom culture and its importance for society.
 - (d) Describe different methods of reproduction observed in lichen.
 - (e) Discuss briefly different methods of sexual reproduction observed in lower group of fungi.
 - (f) Describe degeneration of sex in fungi.