



K25U 2315

Reg. No. :

Name :

V Semester B.Sc. Degree (CBCSS – OBE – Regular/Supplementary/
Improvement) Examination, November 2025
(2019 to 2023 Admissions)

CORE COURSE IN BOTANY/PLANT SCIENCE
5B08BOT/PLS – Microbiology, Mycology, Lichenology and
Phytopathology

Time : 3 Hours

Max. Marks : 40

PART – A
(Objective Type Questions)

Answer all.

(4×1=4)

- Which of the following is an example of actinomycetes ?
 - Rhizobium*
 - Streptomyces*
 - Saccharomyces*
 - Lactobacillus*
- A nematode-borne plant disease from the list is
 - Root knot of vegetables
 - Citrus canker
 - Soft rot of ginger
 - Grey leaf spot of coconut
- Identify the reserve food material in most fungi.
 - Starch
 - Glycogen
 - Cellulose
 - Sucrose
- A disease caused by *Pythium*
 - Damping-off disease
 - Rust disease
 - Ergot disease
 - Powdery mildew

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PART – B
(Short Essay Questions)

Answer any eight.

(8×2=16)

- List two characteristic features of Zygomycetes.
- Mention the precautions to be taken during phytopathology specimen collection.
- State two differences between bacteria and cyanobacteria.
- Mention the pathogen and symptoms of grey leaf spot of coconut.
- Identify two microorganisms belonging to the group Cyanobacteria.
- Compare obligate and facultative parasites with examples.
- Explain sexual reproduction in *Penicillium*.
- Name two viral disease in humans.
- Explain the cause and management of abnormal leaf fall in rubber.
- Explain the role of pili in bacteria.
- Define rhizosphere.
- Identify the common modes of transmission of plant pathogens.

PART – C
(Essay Questions)

Answer any four.

(4×3=12)

- Explain VAM association.
- Differentiate between lytic and lysogenic cycles in viruses.
- Describe three features used in the classification of fungi.



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- Explain the industrial uses of lichens.
- Describe the features of *Pythium* mycelium.
- Explain the major steps of Gram staining.

PART – D
(Long Essay Questions)

Answer any one.

(1×8=8)

- Evaluate the economic importance of microorganisms in various sectors.
- Describe the structure and reproduction of *Agaricus* with appropriate diagram.
- Discuss the disease cycle, differentiating between simple interest and compound interest disease, with suitable examples.