



K22U 2286

Reg. No. :

Name :

V Semester B.Sc. Degree (CBCSS – OBE – Regular/Supplementary/
Improvement) Examination, November 2022
(2019 Admission Onwards)
Core Course in Botany/Plant Science
5B08BOT/PLS : MICROBIOLOGY, MYCOLOGY, LICHENOLOGY AND
PHYTOPATHOLOGY

Time : 3 Hours

Max. Marks : 40

Instruction : Draw diagrams wherever specified.

PART – A
(Objective type questions)

Answer all.

(4×1=4)

- Soil region influenced by root region is called
 - Rhizoplane
 - Top-soil
 - Rhizosphere
 - Soil zone
- Rhizopus belongs to
 - Ascomycetes
 - Zygomycetes
 - Oomycetes
 - Basidiomycetes
- Litmus paper is made from a lichen
 - Rocella
 - Cladonia
 - Usnea
 - Peltigera
- Soft rot of Ginger is caused by
 - Pythium
 - Phytophthora
 - Pestalotia
 - Phytoplasma

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PART – B
(Short essay questions)

Answer any eight.

(8×2=16)

- Discuss the ecological significance of microbes.
- Describe the structure of mycoplasma.
- Discuss the role of fungi in industry.
- Explain the external features of the fruit body of Cup Fungi.
- Define lytic cycle.
- Discuss the role of Lichen as pollution indicator.
- Define phyllosphere.
- Define disease cycle in plants.
- What is serial dilution technique ? Mention its applications in microbiology.
- Explain host-parasite interaction.
- Mention the causal organism and symptoms of mosaic disease of tapioca.
- List out the laboratory biosafety measures.

PART – C
(Essay questions)

Answer any four.

(4×3=12)

- Briefly explain the Lysogenic life cycle of virus.
- Outline the classification of fungi proposed by Alexopolous 1996.
- Discuss the scope of microbiology.



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- Mention the difference between ascomycetes and basidiomycetes.
- Explain the causal organism, symptoms and control measures of Mahali disease of Arecanut.
- Explain the staining techniques in fungi.

PART – D
(Long essay questions)

Answer any one.

(8×1=8)

- Briefly explain the structure and reproduction of Saccharomyces.
- Classify the plant disease based on causal agent and symptoms.
- Describe the structure of TMV and Bacteriophage. Draw labelled diagram.