K24U 2716

Reg. No. : .....

Name : .....

V Semester B.Sc. Degree (C.B.C.S.S. – O.B.E. – Regular/Supplementary/ Improvement) Examination, November 2024
(2019 to 2022 Admissions)
CORE COURSE IN BOTANY/PLANT SCIENCE
5B08 BOT/PLS : Microbiology, Mycology, Lichenology and Phytopathology

Time : 3 Hours Max. Marks : 40

PART – A
(Objective Type Questions)

Answer **all** questions. **(4×1=4)**

1. Which of the following is a bacterial disease ?
   a) Citrus canker b) HIV c) SARS-COV d) Ebola
2. The fungal partner in mycorrhizae is usually
   a) Bacteria b) Virus c) Algae d) Fungus
3. Which of the following is an endophytic microorganism ?
   a) Rhizobium b) Acetobacter c) Azospirillum d) Vibrio
4. The region where lichen is used as a pollution indicator is
   a) Lithosphere b) Hydrosphere c) Atmosphere d) Stratosphere

PART – B
(Short Essay Questions)

Answer **any eight**. **(8×2=16)**

5. Discuss the structure of a bacteriophage.
6. Write down the characteristic features of Ascomycetes.
7. Write a short note on the economic importance of Penicillium.

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8. Explain the classification of mycorrhizae.
9. Discuss the role of biocontrol agents in pest management.
10. Describe the laboratory protocol for studying the causal organism of grey leaf spot of coconut.
11. Write a note on the mycology of Aspergillus.
12. What is Ectomycorrhiza ? Write two of its significance.
13. What are Mycoplasma ?
14. Describe the different types of biofertilizers.
15. Describe the thallus structure of crustose lichen.
16. Write a note on pycnidia.

PART – C
(Essay Questions)

Answer **any four**. **(4×3=12)**

17. Discuss the role of fungi in industrial applications.
18. Explain the management practices for Mahali disease of arecanut.
19. Describe the life cycle and economic importance of Penicillium.
20. Describe the spore staining procedure.
21. Explain the serial dilution technique for microbial count.
22. Write a note on Zygomycetes with examples.

PART – D
(Long Essay Questions)

Answer **any one**. **(1×8=8)**

23. Explain the life cycle of Peziza with suitable diagrams.
24. Discuss the replication cycle of TMV.
25. Explain the causal organisms and symptoms of citrus canker, quick wilt of pepper, abnormal leaf fall of rubber and soft rot of ginger.

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