K23U 2331

Reg. No. : .....

Name : .....

V Semester B.Sc. Degree (CBCSS – OBE – Regular/Supplementary/ Improvement) Examination, November 2023
(2019 – 2021 Admissions)
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)**

1. Algal bloom is caused due to
   a) Pollution b) Eutrophication
   c) Effluent d) Deoxygenation
2. Two celled spore of rust of wheat is
   a) Uredial b) Telial c) Basidial d) Aecidial
3. *Meloidogyne incognita* causes
   a) Soft rot b) Quick wilt
   c) Mosaic disease d) Root knot
4. The region around the root is called
   a) Rhizosphere b) Rhizotone c) Lithosphere d) Phylloplane

PART – B
(Short Essay Questions)

Answer **any eight.** **(8×2=16)**

5. What is VAM ? Discuss its significance.
6. Write down the characteristic features of Deuteromycetes.

P.T.O.

7. Describe the structure of *Penicillium with illustration.*
8. Comment on Acervulus. Give example.
9. Write notes on the ecological significance of fungi.
10. What are Rickettsiae ?
11. Describe the transduction in Bacteria.
12. Give an account of structure of HIV.
13. Draw and describe Mycoplasma.
14. Write notes on bio-fertilizers.
15. Discuss various safety measures to be followed in microbiology laboratory.
16. Write a short note on basidiocarp of Agaricus.

PART – C
(Essay Questions)

Answer **any four.** **(4×3=12)**

17. Discuss serial dilution technique.
18. Explain the causal organism, symptoms and control measures of Bunchy top of Banana.
19. Describe the life cycle of *Usnea.*
20. Describe the procedure of Gram staining.
21. Explain the structure of TMV with illustration.
22. List out the characteristic features of Basidiomycetes.

PART – D
(Long Essay Questions)

Answer **any one.** **(1×8=8)**

23. Explain the causal organisms, symptoms and control measures of a bacterial, fungal and nematode disease in the syllabus.
24. Describe the ultra-structure of a bacterial cell and add a note on its flagellum.
25. Explain the structure and life cycle of Saccharomyces. Add a note on its economic importance.
