25U217 (Pages: 2) Name : .....

Reg. No : .....

SECOND SEMESTER UG DEGREE EXAMINATION, APRIL 2026

(FYUGP)

(Regular/Supplementary/Improvement)

CC24UBOT2MN100 - MICROBIAL DIVERSITY AND PHYTOPATHOLOGY

(Botany - Minor Course)

(2024 Admission onwards)

Time: 2.0 Hours Maximum: 70 Marks

Credit: 4

Part A (Short answer questions)

Answer ***all*** questions. Each question carries 3 marks.

1. Explain the key characteristics of Protista and Monera in Whittaker's system. [Level:2] [CO1]
2. Describe the structure of virons. [Level:2] [CO1]
3. Describe the role of lysozyme in degrading the bacterial cell wall. [Level:2] [CO2]
4. Summarise the differences between the donor and recipient cells in bacterial conjugation. [Level:2] [CO2]
5. Explain any six characters of Eubacteria. [Level:2] [CO2]
6. Explain any two types of streaking techniques for pure culture isolation. [Level:2] [CO2]
7. Explain any three mechanism of plant growth promoting bacteria. [Level:2] [CO3]
8. Explain any three mechanism of probiotics. [Level:2] [CO3]
9. Explain the role of biological control agents in disease management. [Level:2] [CO4]
10. Summarize the epidemiology of Quick Wilt of pepper caused by fungal pathogens. [Level:2] [CO4]

(Ceiling: 24 Marks)

Part B (Paragraph questions/Problem)

Answer ***all*** questions. Each question carries 6 marks.

11. Explain the general account of H1N1 virus. [Level:2] [CO1]
12. Explain the characters and occurance of virus. [Level:2] [CO1]
13. Explain the procedure and mechanism of gram staining. [Level:2] [CO2]
14. Explain the different organelles present in bacterial cytoplasm. [Level:2] [CO2]

15. Discuss the different methods of asexual reproduction in bacteria. [Level:2] [CO2]

16. Explain gene therapy and application of viral vectors in gene therapy. [Level:2] [CO3]

17. Explain any three application of extremophiles in biotechnology. [Level:2] [CO3]

18. Explain the symptoms of mycoplasma and nematode plant diseases and their effects on plant health. [Level:2] [CO4]

(Ceiling: 36 Marks)

Part C (Essay questions)

Answer any ***one*** question. The question carries 10 marks.

19. Explain the structure and functions of bacterial cell membrane. [Level:2] [CO2]

20. Explain host parasite interaction with the help of different steps involved. [Level:2] [CO4]

(1 × 10 = 10 Marks)

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