QP CODE: 24020201

Reg No : Name :

B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, MAY 2024

Second Semester

B.Sc Zoology and Industrial Microbiology Model III Double Main

Complementary Course - ZI2CRT06 - AGRICULTURAL MICROBIOLOGY

2017 ADMISSION ONWARDS

F1BD38C9

Time: 3 Hours

Max. Marks : 60

Part A

Answer any ten questions.

Each question carries **1** mark.

- 1. Important roles of microorganisms in agriculture.
- 2. Amensalism.
- 3. Guano deposit.
- 4. Rhizoplane.
- 5. Ectomycorrhiza.
- 6. Citrus canker.
- 7. Rotting.
- 8. Grassy shoot diseases of sugar cane.
- 9. Root noodules.
- 10. Seed treatment.
- 11. Azolla.
- 12. Fungal pesticides.

(10×1=10)

Part B

Answer any **six** questions.

Each question carries **5** marks.



- 13. Describe zooxanthellae and mutualism.
- 14. Discuss biochemistry and physiology of nitrogen fixation.
- 15. Describe carbon cycle.
- 16. Write any two nitrogen fixing bacteria and explain their production and field applications.
- 17. Write short notes on bacterial plant diseases.
- 18. Describe the fungal diseases.
- 19. What is azospirillum? What are the important steps involved in the production of azospirillum inoculant?
- 20. Describe Bacterial pesticides.
- 21. Define viral pesticide. Write short notes on NPVS, Non- occluded Baculoviruses and Granulosis virus.

(6×5=30)

Part C

Answer any two questions.

Each question carries **10** marks.

- 22. Explain the parasitism, predation and neutralism.
- 23. Explain the plant microbe interaction.
- 24. Define viral disease.Give an account on TMV and explain the structure of TMV with neat diagram.
- 25. Discuss briefly the production and field application of azotobacter and Rhizobium.

(2×10=20)