K21U 0137

| Reg. | No       | ). | :   |    | • •          |     | 9 1 | 8 ( | ٠. | • : | <br>, | • • | • | • • |   | ٠, | • | * : |  | × | • |
|------|----------|----|-----|----|--------------|-----|-----|-----|----|-----|-------|-----|---|-----|---|----|---|-----|--|---|---|
| Name | <b>:</b> |    | a n | ., | <b>1</b> 2 : | e K |     |     |    |     |       |     |   |     | _ |    |   |     |  |   |   |

# VI Semester B.Sc. Degree (CBCSS – Reg./Supple./Improv.) Examination, April 2021 (2014 – 2018 Admissions) CORE COURSE IN MICROBIOLOGY 6B17MCB: Agricultural Microbiology and Plant Pathology

Time: 3 Hours

Max. Marks: 40

# SECTION - A

Answer all the four questions.

 $(1 \times 4 = 4)$ 

- 1. Who is the father of Plant Pathology?
- 2. Causal organism of red rot of sugar cane.
- 3. Name the oxygen scavenger in root nodules of leguminous plants.
- 4. Erwinia is Not a PGPR (True or False).

### SECTION - B

Answer very briefly on any seven questions out of 14.

 $(2 \times 7 = 14)$ 

- 5. Martinus Willium Beijerinck.
- 6. Humus.
- 7. Anabaena azollae.
- 8. Disease triangle.
- 9. Rhizosphere.



- 10. Bordeaux mixture.
- 11. Heterocyst.
- 12. Trichoderma.
- 13. Xanthomonas axonopodis pv. Citri.
- 14. Virulence v/s Pathogenicity.
- 15. Biofertilizer.
- 16. VAM.
- 17. Rice blast.
- 18. Parasitism.

# SECTION - C

Answer any four questions out of 8 briefly.

 $(4 \times 3 = 12)$ 

- 19. Factors influencing disease development in plants.
- 20. Production and applications of Rhizobium as biofertilizer.
- 21. Nitrogenase enzyme.
- 22. Write short note on classification of fungicides.
- 23. Give an account of Fungal diseases in spices.
- 24. Give short notes of the following plant diseases:
  - a) Rhizome rot
  - b) Marble mosaic disease.
- 25. Commercial importance of Azolla-Anabaena.
- 26. Lithosphere.



## SECTION - D

Answer any two questions out of six.

 $(2 \times 5 = 10)$ 

- 27. Write an essay on Mycorrhizae.
- 28. Discuss the causal organism, symptoms and control measures of the following diseases in brief.
  - a) Quick wilt of pepper.
  - b) Wheat rust.
  - c) Bud rot of coconut.
- 29. Briefly discuss on the following:
  - a) Importance of soil microflora.
  - b) Effect of Rhizosphere and plant microbe interaction.
- 30. What is nitrogen fixation? Explain the mechanism of symbiotic nitrogen fixation.
- 31. Write a short note on various biological control measures of plant diseases.
- 32. Briefly discuss the resistance strategies adopted by plants against plant diseases.