K19U 0132 Reg. No.:.... Name : ..... VI Semester B.Sc. Degree (CBCSS - Reg./Supple./Improv.) Examination, April 2019 (2014 Admission Onwards) CORE COURSE IN MICROBIOLOGY 6B17 MCB : Agricultural Microbiology and Plant Pathology Time: 3 Hours Max. Marks: 40 Instruction : Draw diagrams wherever necessary. SECTION - A Answer all questions. Each question carries 1 mark. The hard and rigid outer layer of earth is called \_\_\_\_\_ 2. Group of bacteria that colonize rhizosphere soil and beneficial to crops are referred as 3. The causative agent of rhizome rot of ginger is \_ 4. The only family of enzymes known to catalyze the reduction of N<sub>2</sub> to NH<sub>3</sub> SECTION - B Answer any seven questions of the following. Each question carries 2 marks.

- 5. Humus b final of the management not beau atmage to thocold no alon a ethily as
- 6. R : S ratio am lounce bits vooloimobige amolginge appointe ant sausaid as
- 7. Hartig net
- 8. Dinitrogenase reductase
- 9. Morphological resistance of plants to acquire infection
- 10. R genes
- 11. Cercospora capsici

## K19U 0132

- 12. Biopesticides
- 13. NOD genes
- 14. Pink disease of rubber.

 $(7 \times 2 = 14)$ 

## SECTION - C

Answer any four questions of the following. Each question carries 3 marks.

- 15. Bacterial flora of soil
- 16. Production of Rhizobium inoculants
- 17. Rhizosphere effect
- 18. Free living nitrogen fixing organisms
- 19. Control of plant diseases using chemical agents
- 20. Bud rot of Arecanut. (4×3=12)

## SECTION - D

Answer any two questions of the following. Each question carries 5 marks.

- 21. Discuss the beneficial effects of symbiotic and non-symbiotic association of microbes with plants. Write a note on soil fungi.
- 22. Discuss the classification of mycorrhizae. Write on the significance of mycorrhizae in agriculture.
- 23. Write a note on biocontrol agents used for management of plant diseases.
- 24. Discuss the etiology, symptoms, epidemiology and control measures of quick  $(2 \times 5 = 10)$ wilt in pepper and grey leaf blight of coconut.