



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.

1. 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_2 to NH_3 is _____ (4×1=4)

SECTION – B

Answer **any seven** questions of the following. Each question carries 2 marks.

5. Humus
6. R : S ratio
7. Hartig net
8. Dinitrogenase reductase
9. Morphological resistance of plants to acquire infection
10. R genes
11. *Cercospora capsici*

P.T.O.

K19U 0132



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

(7×2=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 wilt in pepper and grey leaf blight of coconut.

(2×5=10)