



K18U 0131

Reg. No. :

Name :

VI Semester B.Sc. Degree (CBCSS – Reg./Supple./Imp.)
Examination, May 2018
CORE COURSE IN MICROBIOLOGY
6B17MCB : Agricultural Microbiology and Plant Pathology
(2014 Admn. Onwards)

Time : 3 Hours

Max. Marks : 40

SECTION – A

Answer all questions. Each question carries 1 mark.

1. The process of soil formation is called _____
2. The causative agent of coffee leaf rust is _____
3. Bordeaux Mix is a mixture of _____ and _____
4. _____ protects nitrogenase from oxygen in root nodules of leguminous plants. (4×1=4)

SECTION – B

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

5. What is an endophyte ?
6. What is humus ?
7. What is rhizosheath ?
8. Describe the symptoms of bud rot of arecanut.
9. What are diazotrophs ?
10. Name biocontrol agents used against root-knot nematodes.
11. What is R/S ratio ?

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12. What is the agricultural significance of *Azospirillum* ?
13. Describe the morphology of Papaya mosaic virus.
14. Differentiate autochthonous and allochthonous microorganisms of a habitat.

(7×2=14)

SECTION – C

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

Write short notes on :

15. Symbiotic nitrogen fixation.
16. Classification of mycorrhizae.
17. Phosphobacteria.
18. Chemical control of plant diseases.
19. Quick wilt of pepper.
20. Factors influencing soil microflora.

(4×3=12)

SECTION – D

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

21. What is rhizosphere effect ? Discuss the role of plant roots and microorganisms in this mutualistic interaction.
22. Describe various defense mechanisms of plants against pathogens.
23. What are the advantages of biofertilizers over chemical fertilizers ? Describe the steps involved in the production of *Rhizobium* inoculants.
24. Discuss the etiology, pathogenesis, symptoms and control of following plant diseases :
- a) Rhizome rot of ginger
- b) Black rust disease of wheat.

(2×5=10)