



K21P 0515

Reg. No. : .....

Name : .....

First Semester M.Sc. Degree (CBSS – Reg./Suppl. (Including Mercy  
Chance)/Imp.) Examination, October 2020  
(2014 Admission Onwards)

**BOTANY**

**BOT 1C 02 : Microbiology and Plant Pathology**

Time : 3 Hours

Max. Marks : 60

**Instruction** : Draw diagrams *wherever* necessary.

**SECTION – A**

1. a) Write a detailed account on historical perspective of microbiology.  
OR  
b) Explain nutritional types of bacteria.
2. a) Describe the economic importance of actinomycetes.  
OR  
b) Describe the different methods of food preservation. **(2×8=16)**

**SECTION – B**

Answer **any two**.

3. a) What are antibiotics ?  
b) Describe bacterial genome.  
c) Explain the production of alcohol. **(1+2+3)**
4. a) What is Rhizosphere ?  
b) Explain Humoral immunity.  
c) Write an account on economic importance of actinomycetes. **(1+2+3)**
5. a) What is pili ?  
b) Describe the structure of viroid.  
c) What are interferons ? **(1+2+3)**

**(2×6=12)**

P.T.O.



## SECTION – C

Answer any 6.

6. Describe the cultural characteristics of bacteria.
7. Describe membrane filter technique of sterilization.
8. Describe production of vitamins.
9. Write an account on toxic residues in feed.
10. Write an account on nutrient deficiencies in plants.
11. Mention the different defence systems in host.
12. Write a note on host metabolic changes due to pathogenesis.
13. Write a brief account on management of powdery mildew of rubber. **(6×3=18)**

## SECTION – D

Answer any seven.

14. Production of citric acid.
15. Cytokines.
16. Selective media.
17. Rhizobium sp.
18. Disease diagnostic criteria.
19. Pesticide residue.
20. Root knot nematode.
21. Antivirals.
22. Food poisoning.
23. Bioreactor.

**(7×2=14)**