K22P 1564

Reg. No. : .....

Name : .....

I Semester M.Sc. Degree (CBSS – Reg./Sup./Imp.) Examination, October 2022
(2019 Admission Onwards)
BOTANY
BOT1C 02 : Microbiology and Plant Pathology

Time : 3 Hours Max. Marks : 60

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

SECTION – A

1. a) Describe the morphology and structure of viruses.
   OR
   b) Write an account on powdery mildew of rubber and nuts fall of arecanut.
2. a) Describe the symbiosis between *Rhizobium* and legumes.
   OR
   b) Describe various methods in microbial growth control.

(2×8=16)

SECTION – B (Answer **any two**)

3. a) Write an account on Quorum sensing.
   b) Describe latrogenic plant diseases.
   c) Briefly describe various types of plasmids. **(1+2+3)**
4. a) Describe the fluid mosaic model.
   b) Give an account on general features of actinomycetes.
   c) The process of production of lactic acid. **(1+2+3)**
5. a) Write an account on systemic fungicides.
   b) Describe acid fast staining.
   c) Describe the process of TMV replication. **(1+2+3)**

(2×6=12)

P.T.O.

SECTION – C (Answer **any six**)

6. Pre-existing barriers to resist disease in plants.
7. Describe spores and cysts.
8. Vertical resistance.
9. Chemotrophs.
10. Atmospheric pollutants in plant diseases.
11. Synchronous growth.
12. Humoral immunity.
13. Food preservation methods.

(6×3=18)

SECTION – D (Answer **any seven**)

14. Episome.
15. Insulin.
16. Agrobacterium.
17. Biotrophs.
18. Induced resistance in plants.
19. Interferon.
20. Denitrification.
21. Biocontrols.
22. Slime layer.
23. Vaccines.

(7×2=14)