0343 ASVEN COLLANDEN COLLA

K19P 1474

Reg. No.:....

Name:.....

I Semester M.Sc. Degree (CBSS-Reg./Suppl.Imp)
Examination, October - 2019
(2014 Admission Onwards)
BOTANY

BOT1 C 02- MICROBIOLOGY AND PLANT PATHOLOGY

Time: 3 Hours

Max. Marks: 60

Instruction:

Draw diagrams wherever necessary.

## SECTION-A

Answer any Two.

(2x8=16)

1. a. Write an account on ultrastructure of Bacterial cell wall.

(OR)

- Describe the structure and replication of TMV.
- 2. a. Explain bacterial growth and factors affecting growth.

(OR)

b. Describe the design and applications of biofermentors.

## SECTION B

Answer any Two.

(1+2+3)

- 3. a. Mention two abiotic agents of plant disease.
  - b. What is monogenic resistance?
  - c. What is meant by differential media?

4. a. What is peptidoglycan?

(1+2+3)

- b. Explain virion structure.
- c. Describe disinfectants.

P.T.O.



a. Mention the causative agent of bud rot of coconut. (1+2+3)

b. Describe the chemistry and structure of flagella.

c. Describe the epidemiology of tikka disease of groundnut.

## SECTION - C

Answer any Six.

 $(6 \times 3 = 18)$ 

- 6. Describe the production of Insulin.
- 7. Explain resistance to antibiotic.
- 8. What are anaerobic microbes?
- 9. Describe the importance of toxic residues in food.
- 10. Explain new technologies in crop improvement for disease resistance.
- 11. Describe the etiology and management of nut fall of arecanut.
- 12. Write a note on radiation method of sterilization.
- 13. Write an account of bacterial genome.

## SECTION - D

Answer any Seven.

 $(7 \times 2 = 14)$ 

- 14. Bacteriophage.
- 15. Prion.
- 16. Production of lactic acid.
- 17. Crown gall.
- 18. Biosensor.
- 19. Humoral immunity.
- 20. Causal agent of red rot of sugarcane.
- 21. Mycoplasma.
- 22. Microbes in recycling process.
- 23. Biocontrol.