



K21P 0515

Reg. No.:....

Name : .....

### First Semester M.Sc. Degree (CBSS - Reg./Suppl. (Including Mercy Chance)/Imp.) Examination, October 2020 memodia and Avenue of the Chance (2014 Admission Onwards) BOTANY

BOT 1C 02 : Microbiology and Plant Pathology as a semi-

striction is alone of the man and max. Marks: 60 Time: 3 Hours

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.
  - b) Describe the different methods of food preservation.

 $(2 \times 8 = 16)$ 

#### 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)

 $(2 \times 6 = 12)$ 

P.T.O.

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### 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. Solo 1 TOB
- 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 - Dat to recovit is notiful in merchan (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.

 $(7 \times 2 = 14)$