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BSCMBC 381

**Choice Based Credit System VI Semester B.Sc. Degree
Examination, September 2022
(2021 – 22 Batch Onwards)
MICROBIOLOGY
Food and Industrial Microbiology**

Time : 3 Hours

Max. Marks : 80

- Note :** 1) Answer both Part – A and Part – B.
2) Draw diagrams *wherever* necessary.

PART – A

1. Answer **any ten** of the following.

(10×2=20)

- a) Aspergillus species.
- b) Food additives.
- c) SPC.
- d) Stormy fermentation.
- e) Antifoam agents.
- f) Screening.
- g) Impeller.
- h) Amylase.
- i) Buttermilk.
- j) Methanogens.
- k) Canning.
- l) GMP.

P.T.O.

**PART – B**

Answer **any four** questions choosing **one full** question from **each** Unit.

Unit – I

2. a) Write a note on 'Food as substrate for microbes'. **5**
b) Explain the various factors influencing the microbial growth in food. **10**

OR

3. a) Give a general account of HACCP. **5**
b) Define food spoilage. Write in detail the physical methods of food preservation. **10**

Unit – II

4. a) Write a note on the microflora of raw milk. **5**
b) What are the methods of milk examination ? Write briefly on the reductase tests of milk. **10**

OR

5. a) Write briefly on the biochemical activities of microbes in the milk. **5**
b) Explain the industrial production of cheese in detail. **10**

Unit – III

6. a) Write briefly on the sterilization of fermenter. **5**
b) Explain the methods of 'Strain Improvement' of industrially important microbes. **10**

OR

7. a) Write a note on the media used in industrial fermentations. **5**
b) What is a fermenter ? Draw a well labelled diagram of a typical fermenter. Explain. **10**

Unit – IV

8. a) Explain the industrial production of Gibberellins. **5**
b) Explain in detail the industrial production of Penicillin. **10**

OR

9. a) What are the types of wines ? Draw the flow chart of wine production. **5**
b) Explain in detail the industrial production of proteases. **10**