

FACULTY OF SCIENCE

B.Sc. (CBCS) III-Year (VI-Semester) Regular & Backlog Examinations, June-2023

Microbiology-VI (A)

(Industrial Microbiology)

Time: 3 Hours

Max Marks: 80

SECTION-A

(4x5=20 Marks)

Answer any Four questions from the following

1. Crowded plate technique.
2. Temperature control in fermentor.
3. Submerged fermentation.
4. Alcohol.
5. Glutamic acid.
6. Turbidostat.

SECTION-B

(4x15=60 Marks)

Answer all the following questions

7. (a) Describe the characteristics of industrially useful Actinomycetes and Molds.
(OR)
(b) Define Immobilisation. Mention the methods used for immobilization of cells and enzymes.
8. (a) Draw and explain the design of Fermenter.
(OR)
(b) Give an account on the Downstream Processing.
9. (a) Explain the phases of microbial growth in Batch fermentation with its kinetics and its applications.
(OR)
(b) Give an account on solid state fermentation.
10. (a) Describe the fermentative production of beer.
(OR)
(b) Explain the production of recombinant vaccines.