

Q.P. Code – 42644

Sixth Semester B.Sc. Degree Examination, September 2020

(CBCS – Semester Scheme)

Microbiology

**Paper MBT 6.2 – INDUSTRIAL MICROBIOLOGY AND
MICROBIAL TECHNOLOGY**

Time : 3 Hours]

[Max. Marks : 90

Instructions to Candidates :

- 1) Answer all questions.
- 2) Draw diagrams wherever necessary.

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PART – A

1. Answer any **TEN** questions in one or two sentences : (10 × 2 = 20)

1. Strain improvement
2. Auxanography
3. Lyophilization
4. Submerged fermentation
5. Flocculation
6. TLC
7. Molasses
8. Foam control
9. Baker's yeast
10. Vitamin B₁₂
11. Biofertilizers
12. Spawn

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PART – B

II. Answer any **SIX** of the following :

(6 × 5 = 30)

13. Explain the scope of Industrial Microbiology.
14. Explain the steps involved in secondary screening techniques in Isolation of Industrially important microorganisms.
15. Briefly explain the temperature regulation in Fermentation process.
16. Explain aeration and agitation in fermentation processes.
17. Briefly explain :
 - (a) Liquid-liquid extraction
 - (b) Ultra filtration
18. Give an account of :
 - (a) Spirulina
 - (b) Hydrogen gas
19. Describe the industrial production of Glutamic acid.
20. Give an account of Hormone production.

PART – C

III. Answer any **FOUR** of the following :

(4 × 10 = 40)

21. Explain the history and development of Industrial Microbiology.
22. Give an account of precipitation methods for the recovery of fermentation products.
23. Describe Tower fermentor and Bubble cap fermentor.
24. Describe the production of Amylase enzyme.
25. Explain the methods of Immobilization of cells and enzymes.