

Sixth Semester B.Sc. Degree Examination, April/May 2019

(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.

PART - A

- I. Answer any **TEN** questions in 1 or 2 sentences : (10 × 2 = 20)
1. Louis pasteur
 2. gRAS
 3. Patent
 4. Koji process
 5. Antifoaming agents
 6. Tower fermentor
 7. Membrane filters
 8. HPLC
 9. Hops
 10. Amylase
 11. Human insulin
 12. Immobilization

PART – B

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

(6 × 5 = 30)

13. Discuss strain improvement methods.
14. Define primary screening and write a note on methods of primary screening.
15. Explain inoculum preparation for large scale fermentation.
16. Discuss the role of crude media components in fermentation processes.
17. Briefly explain :
 - (a) Microfiltration
 - (b) Distillation
18. Give an account of :
 - (a) Biofuels
 - (b) Algal biofertilizers
19. Describe the industrial production of pencyllin.
20. Briefly explain the industrial production of Vitamin B₁₂.

PART – C

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

(4 × 10 = 40)

21. Describe the methods of maintenance of stock cultures in industries.
22. Give an account of cell disruption methods for the recovery of fermentation products.
23. Describe stirred aerated and airlift fermentors.
24. Describe the production of organic acid in detail.
25. Explain the procedure of mushroom cultivation.