



25020459

QP CODE: 25020459

Reg No :

Name :

**B.Sc DEGREE (CBCS) REGULAR / REAPPEARANCE / MERCY CHANCE
EXAMINATIONS, FEBRUARY 2025**

Sixth Semester

B.Sc Microbiology Model III

CHOICE BASED CORE COURSE - MB6CBT01 - MICROBIOPROCESS

2017 Admission Onwards

B329902D

Time: 3 Hours

Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. Note on primary metabolites.
2. Note on advantage of bioprocess.
3. Identify the exponential phase in fed batch fermentation.
4. Make a note on tropophase.
5. Note on Vegetable oils are used in media give reasons.
6. What are inducers? Explain with an example.
7. What are antifoam agents and give examples?
8. Discuss foam control in fermenter.
9. What is agitator and its function?
10. Explain Upstream process.
11. Discuss the fermentation economics in water usage and recycling.
12. Note on various product categories recognized economically having market potential.

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*





13. Discuss different stages in fermentation.
14. Explain about replica plate technique
15. Differentiate between closed and open culture.
16. Discuss the characteristics of fermentation media.
17. Distinguish between defined and undefined components in media.
18. Discuss the different criteria followed for media formulation
19. Describe the Foam sensing and control device used in a fermenter.
20. Describe the importance of oxygen determination and control in bioreactor.
21. Describe any two batch filters.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Elaborate in detail the continuous and batch fermentation with diagram.
23. Write an essay on different types of fermenters and their uses.
24. Discuss the mechanism of aeration and agitation in detail.
25. Explain the role of chromatographic techniques in purification of fermented product.

(2×15=30)

