



QP CODE: 24000701



24000701

Reg No :

Name :

B.Sc DEGREE (CBCS) REGULAR / REAPPEARANCE EXAMINATIONS, MARCH 2024

Sixth Semester

B.Sc Microbiology Model III

CHOICE BASED CORE COURSE - MB6CBT01 - MICROBIOPROCESS

2017 Admission Onwards

F5E51CBA

Time: 3 Hours

Max. Marks : 80

Part A

*Answer any **ten** questions.*

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

1. What is meant by idiophase?
2. Make a note on the advantage of secondary screening.
3. Make a note on Log phase in batch fermentation.
4. Discuss chemostat.
5. Note on Undefined Media.
6. What is media formulation?
7. What is submerged fermentation?
8. Discuss tower fermenter.
9. Discuss about volumetric oxygen transfer.
10. Explain Upstream process.
11. What are filter aids?
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 various primary screening techniques.
15. Explain about replica plate technique.
16. Describe various nutrient sources in media.
17. Distinguish between inhibitors and precursors.
18. Explain the role of antifoams in detail with an example.
19. Describe the Foam sensing and control device used in a fermenter.
20. Describe the structural components of a fermenter involved in aeration and agitation.
21. Explain the recovery and partial purification of Penicillin G.

(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. Describe the fermentation potential in strain improvement.

(2×15=30)

