



23105143

QP CODE: 23105143

Reg No :

Name :

**B.Sc DEGREE (CBCS) REGULAR / REAPPEARANCE EXAMINATIONS,
MARCH 2023**

Sixth Semester

B.Sc Biotechnology Model III

CORE COURSE - BT6CRT16 - INDUSTRIAL BIOTECHNOLOGY

2017 Admission Onwards

2630F5C1

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. Listout the disadvantages of SSF.
2. Write down any two important applications of bioprocess in industry.
3. List out Isolation techniques in Industrial Biotechnology.
4. Define cybrid.
5. Define fermentation medium.
6. Write down the correlation between salt concentration and fermentation.
7. Comment on media optimization.
8. Differentiate a bioreactor from a chemical reactor.
9. Write down the basic requirement of a bioreactor.
10. Define thermistors.
11. What are the applications of protease enzyme?
12. List few microorganisms producing antibiotics.

(10×1=10)





Part B

*Answer any **six** questions.*

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

13. Give an account of industrial biotechnology.
14. Explain primary metabolites with examples.
15. Comment on secondary screening technique.
16. List out the methods for the identification of industrially important microbes.
17. Distinguish between defined and undefined medium.
18. Illustrate the antifoam agents used in fermentation medium.
19. List out the types of bioreactor and discuss the advantages of using each bioreactor.
20. Give an account on the production of any microbial primary metabolite.
21. What are the advantages of immobilized cells?

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. Explain the advantages of bioprocess over chemical process.
23. Write an essay on the methods of strain improvement.
24. Explain continuous fermentation.
25. What is downstream processing? Explain the different steps involved in DSP.

(2×10=20)

