



25022346

**QP CODE: 25022346**

**Reg No** : .....

**Name** : .....

**M.Sc DEGREE (CSS) SPECIAL REAPPEARANCE EXAMINATION, APRIL 2025**

**Third Semester**

M.Sc BIOTECHNOLOGY

**CORE - BT020301 - BIOPROCESS TECHNOLOGY**

2019 ADMISSION ONWARDS

907E2FB6

Time: 3 Hours

Weightage: 30

**Part A (Short Answer Questions)**

*Answer any **eight** questions.*

*Weight **1** each.*

1. What are industrially important microorganism?
2. What is defined media.?
3. Write the Monod equation and explain the terms.
4. Mention any four aims of GLP.
5. Differentiate between laminar and turbulent flow.
6. Define GMP.
7. List out physical containment in a laboratory.
8. Write down the culture media used for phenyl alanine production.
9. Liist out the strains used for streptomycin production.
10. What is butter milk?

(8×1=8 weightage)

**Part B (Short Essay/Problems)**

*Answer any **six** questions.*

*Weight **2** each.*

11. What are auxotrophic mutants. write the significance.
12. Why do we preserve microorganism?
13. List out the merits of solid state fermentation.





14. Describe the methods used for immobilisation.
15. Write notes on the aerator systems in reactors.
16. Explain the working of DO probe.
17. Name the informations associated with a patent application.
18. Outline the steps involved in the product recovery of citric acid.

(6×2=12 weightage)

**Part C (Essay Type Questions)**

*Answer any **two** questions.*

*Weight 5 each.*

19. Explain microbial multi- omics analysis.
20. Discuss the different types of bioreactors you have studied.
21. Describe different methods of downstream processing.
22. Write an essay on Single cell protein production.

(2×5=10 weightage)

