



QP CODE: 24027533



Reg No :

Name :

**B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE
EXAMINATIONS, OCTOBER 2024**

Third Semester

B.Sc Zoology and Industrial Microbiology Model III Double Main

Core Course - ZI3CRT08 - INDUSTRIAL MICROBIOLOGY

2017 Admission Onwards

0D017C57

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

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

1. Spontaneous generation.
2. Germtheory of disease.
3. Carbon source.
4. Enhancers.
5. Continuous sterilization.
6. What are the role of enhancers and precursor in fermentation process?
7. Distinguish between batch and continuous fermentation.
8. Bioreactor.
9. Batch fermenter.
10. Control process.
11. Physical methods.
12. Physical methods of cell disruption.

(10×1=10)

Part B

*Answer any **six** questions.*

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





13. Mention the process involved in Strain improvement and selection process.
14. Write short note on Strain development.
15. What are carbon source ? Explain the role of growth factors in fermentation media.
16. Explain briefly on Fluidized bed Fermenter.
17. Write short note on Tubular Fermenter.
18. Write short note on Down stream processing.
19. How to evaluate Market Potential assessed in downstream processing?
20. Explain downstream process.
How the product can be (a) drying, (b) packing, (c) labelling ?
21. Explain the purification of the product and the value of market potential in industries.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. What do you mean by screening? Give a detailed note on different screening methods.
23. Write an essay on Preservation and storage of microorganisms. Enumerate the scope of industrial microbiology.
24. Explain the structure of a typical fermenter & the process involved in fermentation with special emphasis on batch fermentor.
25. Describe Fermentation process: and Explain A) Surface B) Submerged C) Continuous fermentation.

(2×10=20)

