

# School of Biological and Life sciences

Department of Biological and Life Sciences

Mid Term Examination

Exam Date: 3 October 2023

Time : 90 Minutes

Marks : 50

## Sem III - MSDB6022 - Industrial Biochemistry

*Your answer should be specific to the question asked*

*Draw neat labeled diagrams wherever necessary*

- 1) Define cellular yield coefficient. K2 (2)
- 2) Define solid state fermentation with example. K1 (3)
- 3) Write note on Baffles and advantages and disadvantages of glass fermentor. K2 (4)
- 4) FDA approve product or Process or both product and process together, Justify ? K2 (6)
- 5) Write short note on following: K3 (6)
  - (i) Different type of sparger
  - (ii) Aspect Ratio of fermentor
- 6) Examine the key differences between Good Manufacturing Practices (GMP) and Good Laboratory Practices (GLP) in the food industry, and explain how each contributes to ensuring product quality and safety. K3 (9)
- 7) Write short note on (i) Ochratoxin (ii) Fumonisin K4 (8)
- 8) Explain the operation of fluidized bed bioreactor, air-lift bioreactors and packed bed bioreactors. K4 (12)

**OR**

Explain the various types of Sparger and agitator. K4 (12)