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**School of Biological and Life sciences**

Bachelor of Science Honours in Microbiology

Semester End Examination - May 2024

Duration : 180 Minutes

Max Marks : 100

**Sem VI - P1UC604B - Industrial Microbiology**General Instructions*Answer to the specific question asked**Draw neat, labelled diagrams wherever necessary**Approved data hand books are allowed subject to verification by the Invigilator*

- 1) Define the synthetic media with examples. K1 (2)
- 2) Extend the solvent-solvent extraction method for the purification of the product in fermentation process. K2 (4)
- 3) Illustrate the industrial production process of beer. K2 (6)
- 4) Apply various screening methods for the isolation of industrially important micro-organisms. K3 (9)
- 5) Development of fermentation medium is necessary for quality and yield of microbial product in a fermentation. Justify this statement. K3 (9)
- 6) Explain the production process and various applications of lipase enzyme in the industry. K5 (10)
- 7) List out the raw materials for the preparation of beer and how does it convert into fermentable sugar. K4 (12)
- 8) Determine the fermentation medium, its components and requirement for a fermentation process. K5 (15)
- 9) Choose any five effective methods for extraction, separation and purification of microbial product in fermentation process. K5 (15)
- 10) Elaborate the different types of chromatographic methods for the purification of product from fermentation medium. K6 (18)