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**School of Biomedical Science**

Master of Science in Medical Biotechnology

Mid Term Examination - May 2024

Duration : 90 Minutes

Max Marks : 50

**Sem II - Q1PP203T - Microbial Technology**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) Explain Microaerophiles. K2 (2)
- 2) Define how microorganisms adapt themselves against UV radiation? K1 (3)
- 3) Explain Psychrotrophs. K2 (4)
- 4) Explain the general characters of Algae. K2 (6)
- 5) Illustrate the general characters of Fungi. K3 (6)
- 6) Illustrate if a culture starts with 50 cells, how many cells will be present after five generations with no cell death? K3 (9)
- 7) Analyze the bacterial growth curve in detail. K4 (8)
  
- 8) Analyze the initial population at time  $t=0$  and find the size of the bacterial population after 5 hrs if the doubling period of a bacterial population is 30 min. At time  $t=120$  min, the bacterial population was 60,000. K4 (12)

**OR**

- Analyze bacteriorhodopsin. K4 (12)