

## ADMISSION NUMBER

## School of Biological and Life sciences Master of Science in Microbiology Mid Term Examination - Nov 2023

**Duration: 90 Minutes** Max Marks: 50

## Sem I - P1PT107B - Cell Biology

## **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)	Which of the following correctly matches a phase of the cell cycle	K2 (2)
2)	What are tunnel proteins? Discribe with suitable example.	K1 (3)
3)	Explain miceller model of plasma membrane with suitable diagram	K2 (4)
4)	What is the nucleus, and what is its role in eukaryotic cells?	K2 (6)
5)	Explain the relationship between the nucleus and the nucleolus in cellular processes.	K3 (6)
6)	Discuss the role of microfilaments in the cell and it's structure with diagram.	K3 (9)
7)	Elaborate the structure and mechanism of nuclear pore complex.	K4 (8)
8)	Explain how the structure and properties of phospholipids help to maintain the structure of cell membranes.	K4 (12)
	OR	
	How is the cell membrane organized? Include lipids and proteins.	K4 (12)