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**School of Biological and Life sciences**

Bachelor of Science Honours in Microbiology

Mid Term Examination - Nov 2023

Duration : 90 Minutes

Max Marks : 50

**Sem III - C2UC304B - Microbial Genetics and Genomics**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) What were the seven characteristics of pea plant studied by mendel? K2 (2)
- 2) Explain the features of plasmids that code for colicin? K1 (3)
- 3) Identify the mutagenic effects of UV rays. K2 (4)
- 4) How are R plasmids different from F plasmids? K2 (6)
- 5) Outline the mechanism of mutation by one physical and one chemical mutagen. K3 (6)
- 6) Assess the mechanism of plasmid replication. K3 (9)
- 7) Analyze the phenomenon and the possible effects of frame shift mutation. K4 (8)
- 8) Assess the main functions of different genes on the Ti-plasmid. K4 (12)

**OR**

Assess the features of F-plasmid and discuss its importance. K4 (12)