



ADMISSION NUMBER

School of Biological and Life sciences

Bachelor of Science Honours in Biomedical Science
Semester End Examination - Aug 2024

Duration : 180 Minutes
Max Marks : 100

Sem II & III- P1UA203B/B1050301T - Toxicology and Pharmacology

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 is Systematic and organ toxins? Give some examples. K1(2)
- 2) Differentiate between biological oxygen demand (BOD) and chemical oxygen demand (COD) as measures of water quality. K2(4)
- 3) Explain the concept of hormesis in toxicology. K2(6)
- 4) What are some common routes through which people can be exposed to toxins in everyday life? K3(9)
- 5) Discuss the details of factors affecting Drug Metabolism. K3(9)
- 6) What are the main neurotransmitter systems targeted by drugs acting on the central nervous system, and how do they modulate neuronal function? K5(10)
- 7) Brief the routes of drug administration and write their advantages. K4(12)
- 8) Define LD50 and LC50 and describe how these parameters are used to assess acute toxicity. Discuss the differences between LD50 and LC50, including their respective measurement methods and units. K5(15)
- 9) What are cyclooxygenases (COX) and what role do they play in the inflammatory response? K5(15)
- 10) Explore the applications of dose-response relationships beyond traditional toxicology, such as in pharmacology, environmental health, and risk assessment. Discuss how dose-response relationships are used to characterize the efficacy and safety of pharmaceuticals, assess environmental exposures, and develop regulatory guidelines for chemical substances K6(18)