

UNIVERSITY OF ESWATINI
DEPARTMENT OF BIOLOGICAL SCIENCES
MAIN EXAMINATION PAPER MAY 2019

TITLE OF PAPER: DRUG METABOLISM & TOXICOLOGY

COURSE CODE: BIO484

TIME ALLOWED: THREE HOURS

INSTRUCTIONS:

1. ANSWER ALL FOUR (4) QUESTIONS IN THIS PAPER
2. EACH QUESTION COUNTS 25 MARKS
3. ILLUSTRATE YOUR ANSWERS WITH LARGE AND CLEARLY LABELLED DIAGRAMS WHERE APPROPRIATE

SPECIAL REQUIREMENTS: NONE

THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATORS

Question 1

Discuss how age and sex affects drug pharmacokinetics and pharmacodynamics. (25 marks)

Question 2

Discuss the factors that affect xenobiotic mediated gastrointestinal absorption and bioavailability. (25 marks)

Question 3

Discuss the role of Cytochrome P450 enzymes in drug metabolism. (25 marks)

Question 4

Discuss Phase I and Phase II reactions in drug metabolism. (25 marks)

END OF EXAMINATION PAPER