



# UNIVERSITY EXAMINATIONS

**SECOND SEMESTER 2023/2024 ACADEMIC YEAR**

**THIRD YEAR EXAMINATION FOR THE DEGREE OF  
BACHELOR OF BIOMEDICAL SCIENCE AND  
TECHNOLOGY**

**BMED 325: INTRODUCTION TO PHARMACOLOGY**

***STREAM: R***

***TIME: 2 HRS***

***DAY: MONDAY [8.30A.M – 10.30A.M***

***DATE: 08/04/2024***

**THIS QUESTION PAPER CONSISTS OF THREE (3) PAGES**

**PLEASE DO NOT OPEN UNTIL THE INVIGILATOR SAYS SO.**



**INSTRUCTONS ANSWER ALL THE QUESTIONS IN SECTION A AND TWO IN SECTION B.**

**SECTION A (40 MARKS)**

**QUESTION ONE**

Define the following pharmacological terminologies. **(5 Marks)**

- i).Drug
- ii). Chemotherapy:
- iii. Prototype
- iv. Therapeutic window,
- iv. Agonist and antagonism.

**QUESTION TWO**

Explain the effects of physiological changes on drugs pharmacodynamics. **(5 Marks)**

**QUESTION THREE**

Briefly explain the disorders that affect pharmacodynamics responses. **(5 Marks)**

**QUESTION FOUR**

Briefly explain the effects of impaired P- 450 system in drug metabolism. **(5 Marks)**

**QUESTION FIVE**

Briefly explain the variety of settings in which chemotherapy may be used in people with cancer: **(5 Marks)**

**QUESTION SIX**

Differentiate between Pharmacodynamics and pharmacokinetics **(5 Marks)**

**QUESTION SEVEN**

Briefly explain the difference between pharmacology and toxicology. **(5 Marks)**

**QUESTION EIGHT**

State any **five** mode of drug actions/ mechanisms **(5 Marks)**



**SECTION B. (30 MARKS)**

**QUESTION NINE**

- a) Discuss the four phases of Pharmacokinetics (12 Marks)
- b) Explain the terms bioavailability and biotransformation (3 Marks)

**QUESTION TEN**

The kidney is the primary organ responsible for drug excretion. Discuss the three processes that affect the excretion of drugs in the urine (15 Marks)

**ELEVEN**

Discuss the various routes of drug administration (15 Marks)

