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MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY

(MMUST)

MAIN CAMPUS

UNIVERSITY EXAMINATIONS

MAIN EXAM

2023/2024 ACADEMIC YEAR

FOURTH YEAR FIRST SEMESTER EXAMINATION

FOR THE DEGREE OF BACHELOR OF SCIENCE IN ENVIROMETAL HEALTH

COURSE CODE: HEM 417

COURSE TITLE: INTRODUCTION TO PHARMACOLOGY

DATE: 5/12/2023

TIME: 2.00-4.00 PM

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INSTRUCTIONS TO CANDIDATES:

ANSWER ALL QUESTIONS IN SECTION A AND ANY TWO IN SECTION B  
TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

Paper Consists of 3 Printed Pages. Please Turn Over



SECTION A [ANSWER ALL]

[40 marks]

1. Define the following terms [4 marks]
  - a. Drug
  - b. Pharmacokinetics
  - c. Pharmacodynamics
  - d. Drug half-life ( $t_{1/2}$ )
  
2. Describe the following drug names [6 marks]
  - a. Chemical name
  - b. International non-proprietary name
  - c. Brand name
  
3. Outline the importance of pharmacology knowledge in environmental health profession [5 marks]
  
4. Outline FIVE measures that can be used to minimize or prevent adverse drug interactions [5 marks]
  
5. Give advantages and disadvantages of the intravenous route of drug administration [8 marks]
  
6. Name four anthelmintic drugs [4 marks]
  
7. Describe THREE sources of drugs [3 marks]
  
8. Give five factors that are considered when selecting the route of drug administration [5marks]

SECTION B [ANSWER ANY TWO]

1. Discuss five parenteral routes of drug administration, including specific advantages and disadvantages of each route [15 Marks].
  
2. Describe four major pharmacokinetics processes that the drug will be subject to over time [15 Marks].
  
3. Discuss the factors that affect absorption of orally administered drugs [15 marks]