



**TECHNICAL UNIVERSITY OF MOMBASA
FACULTY OF APPLIED AND HEALTH SCIENCES**

**DEPARTMENT OF ENVIRONMENT AND HEALTH SCIENCES
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN
COMMUNITY HEALTH
BSCH14S**

APM 4221: INTRODUCTION TO PHARMACOLOGY

SEMESTER EXAMINATION

May 2016

2 HOURS

INSTRUCTIONS TO CANDIDATES

*This paper consists of **FIVE** questions*

*Answer question **ONE** (compulsory) and any other **TWO** questions*

*This paper consists of two **PRINTED** pages*

QUESTION ONE

- (a) State **FOUR** factors that determine the choice of the route of drug administration (**4 marks**)
- (b) Discuss Patients and community in irrational use of drugs (**4 marks**)
- (c) Define the term **drug bioavailability** as used in pharmacology (**2 marks**)
- (d) Interpret the following medication orders (**3 marks**)

Paracetamol 500 mg 2 tabs po tid x 3/7

- i. How many times per day will the medicine be administered?

- ii. How many days with the drug be administered?
- iii. In total, how many tablets of Paracetamol with be administered at the end of treatment?

- (e) Why hyaluronidase enzyme is added to the injection fluid **(3 marks)**
- (f) List FOUR factors that affect drug metabolism **(5 marks)**
- (g) Describe why monitoring of drug administration is a public health concern **(5 marks)**
- (h) Outline any **Four** challenges associated with dispensing herbal medicines in the community **(4 marks)**

QUESTION TWO

- a) Describe the fundamental concept of pharmacokinetics as applied in pharmacology. (4 marks)
- b) Describe the FOUR components of pharmacokinetics. (16 marks)

QUESTION THREE

- (a) Describe the four phases of clinical trials. **(12 marks)**
- (b) State any four reasons why generic name of a drug is preferred over trade name when prescribing drugs **(8 marks)**

QUESTION FOUR

- a) Discuss the concept of rational drug use. (10 marks)
- b) Discuss five elements of a valid drug label. (10 marks)

QUESTION FIVE

- a) Give two advantages and disadvantages of four different routes of drug administration. (20 marks)