



Technical University of Mombasa

Faculty of Applied and Health Sciences

DEPARTMENT OF ENVIRONMENT AND HEALTH SCIENCES

DIPLOMA IN COMMUNITY HEALTH AND HIV MANAGEMENT
(DCH 12S)

APM 2209 : FUNDAMENTALS OF PHARMACOLOGY

SUPPLEMENTARY/SPECIAL: EXAMINATIONS

SERIES: MARCH 2014

TIME: 2 HOURS

INSTRUCTIONS:

You should have the following for this paper

- *Answer booklet*

This paper consists of **FIVE** questions.

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

QUESTION ONE

- a) Define the following terms
 - (i) Placebo (2 marks)
 - (ii) Pharmacokinetics (2 marks)
- b) Give four uses of drugs (4 marks)
- c) What is first pass effect (2 marks)
- d) Explain what is sublingual administration giving advantages of this route (4 marks)
- e) Outline four uses of NSAIDS (4 marks)
- f) Distinguish between toxic effects and side effects (4 marks)
- g) Explain why patients on tetracycline therapy are advised to avoid milk or antacids (4 marks)
- h) Outline four disadvantages of oral of drug administration (4 marks)

QUESTION TWO

- a) Explain factors affecting the rate of gastro-intestinal absorption of drug (12 marks)
- b) Explain the term bioavailability of drugs (3 marks)

QUESTION THREE

- a) Explain any four mechanisms of action across the cell membrane (12 marks)
- b) Explain why lignocaine mixed with adrenaline is injected mixed with adrenaline is injected into the gum during tooth extraction (3 marks)

QUESTION FOUR

Explain disadvantages of parenteral injections (15 marks)

QUESTION FIVE

- a) Discuss factors that influence drug distribution in the body (10 marks)
- b) Explain why hyaluronidase enzyme is added to the injection fluid. (5 marks)