

**CHUKA**



**UNIVERSITY**

**UNIVERSITY EXAMINATIONS**

**1<sup>ST</sup> YEAR EXAMINATION FOR THE AWARD OF  
MASTERS OF SCIENCE IN NURSING**

**NUMS 823: ADVANCED PHARMACOLOGY I**

**TIME: 3 HOURS**

**DAY/DATE:.....**

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**INSTRUCTIONS:**

- Do not write anything on the question paper.
- Mobile phones and any other reference materials are NOT allowed in the examination room.
- Number ALL your answers and indicate the order of appearance in the space provided in the cover page of the examination answer booklet.

## ANSWER ALL QUESTIONS

- 1 a Using **gentamycin** as an example, explain the pharmacokinetic processes (10mks)
- b. Describe the drug development process. (10mks)
- 2 a. Classify **penicillin's** according to their spectrum of activity, clearly indicating relevant examples, clinical indications and adverse effects of each class. (10mks)
- b. Discuss the **two main acts** of parliaments that control and regulate drugs production, distribution, prescription and administration in Kenya (10mks)
3. a. Explain four classes of **antiretroviral** drugs used in management of HIV/AIDS clearly outlining their mechanism of action, side effects and two examples in each class. (10mks)
- b. Discuss use of **chiropractic and acupuncture** as complementary modes of treatment (10mks)
4. a. Describe the clinical uses, route of administration, mechanism of action and side effects of the “**azoles**” group of **antifungal** compounds. (10 marks)
- b. Drug interactions can be **beneficial** or **harmful**. Using relevant examples, explain three situations in which we combine drugs for their beneficial effects and two situations where combination may be harmful. (10mks).
5. a. Classify **fluoroquinolones**, clearly indicating examples of drugs, clinical uses and adverse effects of each class. (10mks)
- b. Describe the clinical uses, route of administration, mechanism of action and side effects of **Tetracyclines** (10 mks)