

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE OF MASTER OF SCIENCE
IN NURSING

NUMS 826: ADVANCED PHARMACOLOGY II

STREAMS: Y1T3

TIME: 3 HOURS

DAY/DATE: MONDAY 27/09/2021

11.30 A.M. – 2.30 P.M.

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 ANY FIVE QUESTIONS

1. a. Discuss the mechanism of action, side effects and main clinical indications of sedative
hypnotics (10 marks)
 - b. Describe **oral contraceptive** including mechanism of action, clinical indications and side effects from the chronic use of these compounds. (10 marks)
2. a. Discuss the mechanism of action, side effects and main clinical indications of any **THREE oral hypoglycemic agents** (10 marks)
 - b. Discuss the mechanism of action, side effects and clinical uses of **THREE** classes of drugs used in **management of cancer** (10 marks)
3. a. Explain mechanisms of action and major side effects of **THREE** classes of drugs used to treat peptic ulcer disease (PUD) associated with hyperacidity. (10 marks)

b. Discuss the mechanism of action, side effects and clinical uses of **Opioid analgesics** (10 marks)

4. a. Using relevant examples explain the following concepts as used in pharmacology:

i. Use of dose response curves in toxicity testing (5 marks)

ii. selective toxicity as applied to antimicrobial drugs (5 marks)

b. Discuss the use of drugs in the treatment of convulsive disorders (epilepsy), focusing on the mechanism of action, main side effects and other clinical indications of **THREE** major classes of **anticonvulsants**. (10 marks)

5. Explain how the **baroreceptor reflex and RAAS system** maintains blood pressure at a normal set point (5 marks)

b. Discuss the pharmacological treatment of hypertension (include in your answer **THREE** classes of drugs used for hypertension, primary mechanism of action, side effects and examples of a drug from each class). (15 marks)

6. a. Discuss the mechanisms of action, clinical indications and side effects of **N on-steroidal anti-inflammatory drugs** (10 marks)

b. Discuss clinical use of **antimuscurinics** (anticholinergics) focusing on their tissue/organ effects, mechanism of action and their clinical indications. (10 marks)

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