

UNIVERSITY OF RUHUNA - FACULTY OF ALLIED HEALTH SCIENCES DEPARTMENT OF PHARMACY

SECOND BPHARM PART II EXAMINATION – JUNE/JULY 2023 PH 2232 PHARMACOLOGY II- SEQ PAPER

TIME: TWO HOURS

INSTRUCTIONS

- There are four questions in part A, B and C in this SEQ paper.
- Answer each part in separate booklet provided.
- No paper should be removed from the examination hall.
- Do not use any correction fluid.
- Use illustrations where necessary.

PART A

1.

1.1.

1.1.1. List four stages of anesthesia.

- (10 marks)
- 1.1.2. Write two advantages of local anesthetics over general anesthetics.

(10 marks)

- 1.1.3. Classify local anesthetics based on the chemical structure and give two examples for each category. (15 marks)
- 1.1.4. List two signs and symptoms of local anesthetic toxicity.

(15 marks)

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- 1.2.1. Categorize antipsychotics. Give three examples of medicines for each of the category you mentioned. (15 marks)
- 1.2.2. Describe the pharmacological basis of common adverse effects due to antipsychotic medications. (35 marks)
- 2. Monoamine oxidase inhibitors are second-line agents used in the treatment of depression.
- 2.1. List two monoamine oxidase inhibitors.

(10 marks)

2.2. Name five other categories of medicines commonly used in the treatment of depression.

Write two examples of medicines to each of the category you mentioned. (30 marks)

- 2.3. Describe the mechanism of action of monoamine oxidase inhibitors. (20 marks)
- 2.4. 'The clinical use of monoamine oxidase inhibitors is restricted due to the possible drugdrug and drug-food interactions.' Justify this statement giving appropriate examples.

(40 marks)

PART B

3.

3.1. Write one example for the following.

(20 marks)

- 3.1.1. Inhibitory neurotransmitters
- 3.1.2. Excitatory neurotransmitters
- 3.1.3. Neuropeptide neurotransmitters
- 3.1.4. Tyrosine-derived neurotransmitters
- 3.2. Describe the six sequential steps involved in cholinergic neurotransmissions. (30 marks)
- 3.3. List four factors affect to deplete neurotransmitter levels in the body. (20 marks)
- 3.4. Write a short note on "drug addiction".

(30 marks)

PART C

4.

- 4.1. Answer the following regarding Non-Steroidal Anti-inflammatory Drugs (NSAIDs).
 - 4.1.1. List two selective COX-2 inhibitors.

(10 marks)

- 4.1.2. Briefly discuss the mechanism of action of selective COX-2 inhibitors. (20 marks)
- 4.1.3. Mention two treatment strategies for aspirin toxicity.

(10 marks

4.1.4. Gastric irritation and ulceration is a common side effect of NSAIDs. Justify this statement while giving a pharmacological approach to overcome that problem.

(15 marks)

- 4.2. Answer the following regarding sedative and hypnotics.
 - 4.2.1. Mention two clinical uses.

(10 marks)

4.2.2. Briefly explain the mechanism of action, two side effects and two precautions of diazepam. (35 marks)