



UNIVERSITY OF RUHUNA – FACULTY OF ALLIED HEALTH SCIENCES

DEPARTMENT OF PHARMACY

SECOND BPHARM PART I EXAMINATION – JULY 2018

PH 2134 PATHOLOGY AND PHARMACOLOGY I (SEQ)

TIME: THREE HOURS

INSTRUCTIONS

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

PART A

1.

- 1.1. Describe the mode of action of adrenaline. (20 marks)
- 1.2. What is the pharmacodynamic difference of adrenaline with noadrenaline? (10 marks)
- 1.3. State the dose of adrenaline in
 - 1.3.1. anaphylactic shock (10 marks)
 - 1.3.2. cardiac arrest (10 marks)
- 1.4. Describe the importance of the dose response relationship of dopamine in clinical practice. (30 marks)
- 1.5. Name the drugs used in open angle glaucoma. (20 marks)

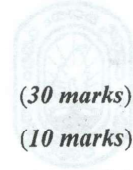
2.

- 2.1. Name phases of clinical trials including the relevant number of participant for study group. (20 marks)
- 2.2. What is the phase of clinical trial which is done to monitor drug effects and safety after the marketing? (10 marks)
- 2.3. State importance of the following phases of drug discovery process.
 - 2.3.1. Target selection
 - 2.3.2. Lead discovery (20 marks)

PART B

- 2.4. Describe the dose response curve of a drug. (50 marks)

PART C



- 3.
- 3.1. Briefly describe the mechanism of action of physostigmine. (30 marks)
 - 3.2. Name **two other cholinergic** drugs other than physostigmine. (10 marks)
 - 3.3. State clinical indications for the drugs you mentioned in 3.2. (20 marks)
 - 3.4. Describe the mode of action, and list side effects of atropine. (25 marks)
 - 3.5. List the common clinical indications of anticholinergic drugs. (15 marks)
- 4.
- 4.1. Briefly describe the mechanism of action of propranolol. (20 marks)
 - 4.2. List the clinical indications of propranolol. (15 marks)
 - 4.3. List the contraindications of propranolol. (15 marks)
 - 4.4. Write brief notes on the use of propranolol in a patient with diabetes. (20 marks)
 - 4.5. State the advice you would give to a patient who was dispensed with GTN sublingual tablets at a Pharmacy outlet. (30 marks)
5. Coombs and Gell classification proposes four categories of hypersensitivity reactions.
- 5.1. Give **two** examples for each type of hypersensitivity reaction. (24 marks)
 - 5.2. Name **three** mediators associated with type I hypersensitivity reactions. (15 marks)
 - 5.3. Briefly explain the mechanism underlying type III hypersensitivity reactions. (30 marks)
 - 5.4. Write **five** common allergens. (15 marks)
 - 5.5. Write **four** allergic reactions that occur on skin. (16 marks)

PART D

- 6.
- 6.1. Define neoplasia. (15 marks)
 - 6.2. Compare and contrast a benign tumor and a malignant tumor. (30 marks)
 - 6.3. State the cellular features of malignancy. (15 marks)
 - 6.4. List **five** malignant tumors. (10 marks)
 - 6.5. Describe the modes of tumor spread. (30 marks)

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