



**UNIVERSITY OF RUHUNA – FACULTY OF MEDICINE**

**ALLIED HEALTH SCIENCES DEGREE PROGRAMME**

**SECOND BPHARM PART I EXAMINATION – NOVEMBER 2015**

**PH 2134 – PATHOLOGY AND PHARMACOLOGY I (SEQ)**

**TIME: THREE HOURS**

**INSTRUCTIONS**

- Answer **all** questions.
- No paper should be removed from the examination hall.
- Do not use any correction fluid.
- Use illustrations where necessary.

1. Write short notes on the followings

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|---------------------------|-------------------|
| 1.1. Dose response curves | <i>(25 marks)</i> |
| 1.2. Receptors            | <i>(25 marks)</i> |
| 1.3. Therapeutic index    | <i>(25 marks)</i> |
| 1.4. Tolerance            | <i>(25 marks)</i> |

2.

- |   |                   |
|---|-------------------|
| 2.1. List five cholinergic drugs                                  | <i>(10 marks)</i> |
| 2.2. Describe the uses of anticholinergic drugs?                  | <i>(50 marks)</i> |
| 2.3.  |                   |
| 2.3.1. Write two groups of neuromuscular blocking drugs           | <i>(5 marks)</i>  |
| 2.3.2. Compare and contrast the two groups you mentioned in 2.3.1 | <i>(35 marks)</i> |

3. Describe the effects of liver dysfunction on drug

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|--|-------------------|
| 3.1. absorption                              | <i>(25 marks)</i> |
| 3.2. plasma protein binding and distribution | <i>(25 marks)</i> |
| 3.3. metabolism                              | <i>(25 marks)</i> |
| 3.4. elimination                             | <i>(25 marks)</i> |

4. Write short notes on

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|------------------------|-------------------|
| 4.1. clinical trials   | <i>(30 marks)</i> |
| 4.2. adrenaline        | <i>(30 marks)</i> |
| 4.3. drug Interactions | <i>(40 marks)</i> |

- 5.
- 5.1. Briefly explain antihypertensive action of  $\beta$ -blockers (40 marks)
- 5.2. Describe the pharmacological basis of using
- 5.2.1. tamsulosin in benign prostatic hyperplasia (20 marks)
- 5.2.2. nitrates in ischaemic heart diseases (40 marks)
6. Answer **all** parts
- 6.1. List 5 features of benign neoplasms (10 marks)
- 6.2. List 5 features of malignant neoplasms (10 marks)
- 6.3. What are the cellular features of malignancy (10 marks)
- 6.4. Write down the cell of origin of following tumours (20 marks)
- 6.3.1 Melanoma
- 6.3.2 Lipoma
- 6.3.3 Leiomyoma
- 6.3.4 Chondroma
- 6.3.5 Lymphoma
- 6.5 Describe routes of tumour spread (10 marks)
- 6.6 What is acute inflammation? (10 marks)
- 6.7 List 5 mediators of acute inflammation and their mode of action (20 marks)
- 6.8 What is a granuloma? (10 marks)