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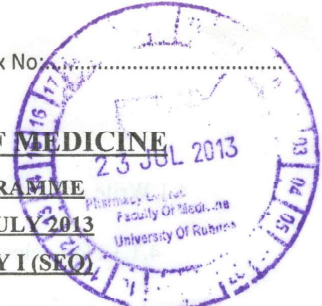
UNIVERSITY OF RUHUNA – FACULTY OF MEDICINE

ALLIED HEALTH SCIENCES DEGREE PROGRAMME

SECOND BPHARM PART I EXAMINATION – JULY 2013

PH 2134: PATHOLOGY AND PHARMACOLOGY I (SEQ)

TIME: 10.30 a.m. – 1.30 p.m.



INSTRUCTIONS

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

1. Write short notes on the following

- 1.1 Tolerance **(25 marks)**
- 1.2 Therapeutic index **(25 marks)**
- 1.3 Bioavailability **(25 marks)**
- 1.4 First pass metabolism **(25 marks)**

2.

- 2.1. Describe the phases of a clinical trial. **(25 marks)**
- 2.2. Indicate the importance of conducting post marketing surveillance. **(25 marks)**
- 2.3. Describe the therapeutic objectives in the management plan of a patient with atrial fibrillation. **(25 marks)**
- 2.4 List the drugs used to achieve the therapeutic objective you mentioned in 2.3 indicating the pharmacological basis. **(25 marks)**

3.

- 3.1 List the pharmacokinetic changes observed during pregnancy. **(20 marks)**
- 3.2 Describe the term, teratogenesis with examples. **(30 marks)**
- 3.3 Briefly indicate the principles of prescribing during pregnancy. **(25 marks)**
- 3.4 List four drugs which are contraindicated during pregnancy. **(10 marks)**
- 3.5 List the pregnancy FDA drug risk categories. **(15 marks)**

4.

4.1 Write an example for the followings. (15 marks)

4.1.1 Non-selective α -adrenoceptor antagonist.4.1.2 α_1 -selective antagonist.4.1.3 α and β adrenoceptor antagonist4.2 List adverse effects of α -antagonist. (15 marks)4.3 Explain the pharmacological basis of using α_1 -selective antagonist in benign prostatic Hypertrophy (BPH). (30 marks)4.4 Compare the therapeutic effects and adverse effect profile between selective and non selective α -adrenoceptor antagonist. (30 marks)4.5 Write a clinical indication for irreversible non selective α adrenoceptor antagonist.

(10 marks)

5.

5.1. List the different types of anti-hypertensives used in clinical practice. (10 marks)

5.2. Describe the mode of action of two groups of antihypertensives you mentioned in

5.1. (30 marks)

5.3. Indicate the pharmacological basis of using frusemide in left ventricular failure.

(25 marks)

5.4. Indicate the most suitable antihypertensive drug for a patient with tachycardia due to thyrotoxicosis (10 marks)

5.4. Describe the pharmacokinetic and pharmacodynamic parameters you would consider as a clinical pharmacist in medical ward when a patient is prescribed with digoxin for cardiac failure. (25 marks)

6.

6.1 What are the cardinal clinical features of acute inflammation?

(15marks) 3x5

6.2 Describe the pathological basis of clinical features mentioned in 6.1.

(25 marks) 5x5

6.3 Give examples of chemical mediators responsible for the clinical features mentioned in

6.1. (30 marks)

6.4 What are the characteristic features of chronic inflammation?

(15 marks) 3x5

6.5 List three causes of granulomatous inflammation.

(15 marks) 3x5