



FACULTY OF MEDICINE, UNIVERSITY OF RUHUNA
THIRD EXAMINATION FOR MEDICAL DEGREES PART II - JULY 2008.

PHARMACOLOGY - PAPER 1

Answer **ALL FOUR** questions
Answer **EACH PART** in a **SEPARATE BOOK**

Friday 18th July 2008
9.00 a.m. - 11.00 a.m.
(2 hours)

PART A

1. 1.1. (20 marks)
 - 1.1.1. List the TEN essential features of a controlled clinical trial of a drug. (10 marks)
 - 1.1.2. Describe TWO of the features mentioned by you above. (10 marks)
- 1.2. Describe briefly the advantages and disadvantages of using generic names of drugs compared to the use of brand (trade) names. (30 marks)
- 1.3. Describe the factors affecting the bioavailability of a drug. Illustrate your answer with examples. (40 marks)
2. 2.1. Describe the mechanism of action of the following drugs. (10 marks)
 - 2.1.1. morphine (10 marks)
 - 2.1.2. chlorpromazine (10 marks)
 - 2.1.3. diazepam (10 marks)
- 2.2. List THREE clinical uses of each of the three drugs above. (20 marks)
- 2.3. Describe briefly the drug treatment of the following conditions, indicating the doses, route of administration and precautions to be taken. (25 marks)
 - 2.3.1. Acute anaphylactic shock (25 marks)
 - 2.3.2. Diabetic ketoacidotic coma

PART B

3. Explain the pharmacological basis for the use of
 - 3.1. digoxin in atrial fibrillation. (30 marks)
 - 3.2. pioglitazone in type 2 diabetes mellitus. (30 marks)
 - 3.3. levodopa and carbidopa in parkinsonism. (40 marks)

PART C

4. Describe the mechanism of action and list the clinical uses, adverse effects and contraindications, of the following drugs. (35 marks)
 - 4.1. streptokinase (35 marks)
 - 4.2. gentamicin (30 marks)
 - 4.3. frusemide

A = A.c. ✓

B = Bicos.
... ..

10/12